

mg 22325
GER-ALMANAC

Forty-first Year of Publication.

KNICKERBOCKER ALMANAC,



FOR THE YEAR OF OUR LORD

1859.

BEING THE THIRD AFTER BISSEXTILE, OR LEAP YEAR.

And (until July 4th) the 83d Year of American Independence.

BY SAMUEL HART WRIGHT,

NEW YORK :

Published by Raynor, Howe & Ferry :

AND SOLD BY

ODELL S. HATHAWAY,

64 Water Street, Newburgh, N. Y.

THE ANATOMY OF MAN'S BODY

AS GOVERNED BY THE
TWELVE CONSTELLATIONS ACCORDING TO ANCIENT ASTROLOGY.
Head and Face ♉



To know where the sign is, first find the day of the month in the calendar page, and against the day in the sixth column, you have the sign or place of the moon; then find the sign here; and it will give you the part of the body it is supposed to govern. The idea that the Moon's place or the signs, have any effect on the human body ought not to be believed.

THE TWELVE SIGNS OF THE ZODIAC.

SPRING SIGNS.

1. ♈ Aries, or Ram.
2. ♉ Taurus, or Bull.
3. ♊ Gemini, or Twins.

SUMMER SIGNS.

4. ♋ Cancer, or Crab fish.
5. ♌ Leo, or Lion.
6. ♍ Virgo, or Virgin.

AUTUMN SIGNS.

7. ♎ Libra, or Balance.
8. ♏ Scorpio, or Scorpion.
9. ♐ Sagittarius, or Bowman.

WINTER SIGNS.

10. ♑ Capricornus, or Goat.
11. ♒ Aquarius, or Waterman.
12. ♓ Pisces, or Fishes.

The first six are called Northern Signs, and the other six Southern Signs.

EXPLANATION OF THE SIGNS USED IN THIS ALMANAC.

☾ New Moon, and Moon generally. ☾ First Quarter. ☾ Full Moon. ☾ Last Quarter. ☾ Moon's ascending Node, or Dragon's Head. ☾ Moon's descending Node, or Dragon's Tail. ☾ In Apogee—farthest from Earth. ☾ In Perigee—nearest to the Earth. ☾ Highest—Moon farthest North. ☾ Lowest—Moon farthest South. ☾ Saturn. ☾ Venus. ☾ Near together. ☾ Jupiter. ☾ Mercury. ☾ 90° apart, ☾ Opposition. ☾ 180° apart, ☾ Mars, ☾ Stars, ☾ Sun, ☾ Herschel.

THE WEATHER.

It is but just to state to the public, that they know as much about the weather for the coming year as we do. No Mathematician or Astronomer, however able in his profession, can possibly "cipher out" the weather. When such predictions are seen in Almanacs, they should be regarded as mere guess work, entitled to no confidence, and as likely to fail as to be true.

CALCULATIONS FOR

An Almanac for the Year of our Lord, 1859, (being the third after Bissextile, and until the 4th of July, the 83d year of American Independence.) Adapted to the Horizon and Meridian of New York.—By Samuel H. Wright, Dundee, Yates County, New York.

CHRONOLOGICAL CYCLES.

Dominical Letter,	-	-	-	-	-	-	-	B.
Golden Number, or Lunar Cycle,	-	-	-	-	-	-	-	17.
Epact, (Moon's age,) January 1st,	-	-	-	-	-	-	-	26.
Solar Cycle,	-	-	-	-	-	-	-	20.
Roman Indiction,	-	-	-	-	-	-	-	2.
Julian Period,	-	-	-	-	-	-	-	6572.

MOVEABLE FEASTS.

Easter Sunday,	-	-	-	-	-	-	April	24.
Rogation Sunday,	-	-	-	-	-	-	May	29.
Ascension Day,	-	-	-	-	-	-	June	2.
Pentecost,	-	-	-	-	-	-	"	12.
Trinity Sunday,	-	-	-	-	-	-	"	19.
Advent Sunday,	-	-	-	-	-	-	Nov.	27.

EQUINOXES AND SOLSTICES.

			D.	H.	M.	
Vernal Equinox,	(Beginning of Spring,)	March,	20	10	24	EV.
Summer Solstice,	(" Summer,)	June	21	7	2	EV.
Autumnal Equinox,	(" Autumn,)	Sept.	23	9	14	M.
Winter Solstice,	(" Winter,)	Dec.	23	3	7	M.

CUSTOMARY NOTES.

VENUS will be Morning Star until September 27th, then Evening Star the rest of the year. MARS will be Evening Star until July 21st, then Morning Star the rest of the year. JUPITER will be Evening Star until June 25th, then Morning Star the rest of the year. SATURN will be Morning Star until June 29th, then Evening Star until August 8th, then Morning Star the rest of the year.

MERCURY will be visible in the west soon after sunset about March 30th, July 28th, and November 22nd,; also may be seen in the east just before sunrise about January 24th, May 22nd, and September 16th.

TABLE

Showing the difference of time when 12 o'clock (noon) at New York.

New York,	12.00	M	Boston,	11.12	P.M.
Buffalo,	12.40	A.M.	Quebec,	11.12	"
Cincinnati,	11.18	"	Portland,	12.15	"
Chicago,	11. 7	"	London,	4.55	"
St. Louis,	10.55	"	Paris,	5. 5	"
San Francisco,	8.45	"	Rome,	5.45	"
New Orleans,	10.56	"	Constantinople	6.41	"
Washington,	11.48	"	Vienna,	6.00	"
Charleston,	11.36	"	St. Petersburg,	6.57	"
Havana,	11.25	"	Pekin, night,	12.40	"

ECLIPSES FOR 1859.

There will be six Eclipses this year, as follows:—

I. A Partial Eclipse of the Sun, Feb. 2nd, invisible in the United States.

II. A Total Eclipse of the Moon, Feb. 17th, early in the morning, visible. It begins at New York at 4 o'clock and 1 minute; becomes *total* at 4h. 58m. and remains total until 5h. 36m. when the eastern limb of the Moon begins to appear. The Moon sets at 6h. 59m., or some 6 minutes *after* the Sun has risen, and with about $\frac{1}{2}$ of it eclipsed at that time. In a *good horizon*, the Eclipse may be seen by *sun light*, a rare occurrence.

III. A Partial Eclipse of the Sun, March 4th, invisible in the United States.

IV. A Partial Eclipse of the Sun, July 29th in the afternoon. This Eclipse will be visible, but *very small* and will last only a few minutes, and occurs about an hour before sunset. Visible in N. E. and the Northern and Middle states.

V. A Total Eclipse of the Moon, Aug. 13th, invisible in the United States.

VI. A Partial Eclipse of the Sun, Aug. 28th, invisible in the United States.

NEW TIDE TABLE.

The Tides given in the Calendar pages are for the Port of New York.

In the last column but one of the Calendar pages, you have the time the Moon is South, and by adding thereto the hours and minutes in the following table, you will have the time of High Water at all the places named below; also the rise of water in feet.

	h.	m.	ft.		h.	m.	ft.		h.	m.	ft.
Albany, N. Y.	3	30	1	Egg Harbor, Gt.	9	34	5	Montauk Point,	8	10	2.6
Amboy, N. J.,	8	15	5	Egg Harbor, Litt.	10	3	5	Mount Desert,	11	2	25.9
Baltimore,	6	33	1.3	Elizabeth Point,	8	57	5	Nantucket,	12	24	3.8
Bay of Fundy,	12	00	60	Fairfield, Conn.,	10	58	6	Narrows, N. Y.,	8	2	6.
Blue Hill Bay,	11	00	12	Guildford, Conn.,	10	28	5	New Bedford,	7	57	3.9
Boston,	11	27	10.6	Halifax, N. S.,	7	30	9	New Haven,	11	16	5.0
Bridgeport, Ct.,	11	11	6.5	Hampton, N. H.,	11	15	12	New London,	9	28	2.1
Brunswick, N.J.,	9	5	5	Hampton Roads,	8	37	5	Newport,	7	45	3.
Campo Bello,	11	00	25	Hartford, Conn.,	9	25		New York,	8	13	3.8
Cape Ann,	11	30	11	Hell Gate,	9	35	6	Norwalk, Conn.,	10	54	
Cape Cod,	11	30	6	Huntington, L. I.,	11	30	5	Norwich,	10	56	
Cape Fear,	7	19	4.5	Islip, L. I.,	8	6	6	Philadelphia,	1	18	6.0
Cape Hatteras,	9	1	5.	Jamaica Bay,	8	0	5	Portland,	11	25	8.9
Cape Henlopen,	5	45	5	Kennebunk, Me.,	11	15	10	Portsm'th N.H.,	11	23	8.6
Cape Henry,	7	51	6	Kingston, N. Y.,	2	30	2	Providence,	8	25	5
Castine, Me.,	11	00	12	Lubec,	11	30	26	Sag Harbor,	9	52	
Charleston,	7	13	5.3	Marblehead,	11	30	10	Sandy Hook,	7	29	4.8
Eastport, Me.,	11	30	15	Martha's Vineyard,	7	37		St. John's,	12	00	30

The actual rise of the Tides depends on the strength and direction of the Wind, and it not unfrequently happens that a Tide which would, independently of these, have been small, is higher than another, otherwise much greater. But when a Tide which arrives when the Sun and Moon are in a favorable position for producing a great elevation, is still further increased by a very strong wind, the rise of the water will be uncommonly great, sufficient, perhaps, to cause damage.

The Table above, is corrected from the Official Tide Table, published by A. D. Bache, Superintendent United States Coast Survey. But only those Ports, or places indicated by *italics* are thus corrected. The others remain as they have been for a long time, and are supposed to be nearly correct.

NOTE.—The calculations of this Almanac have been made exclusively for it. The Sun Rising and Setting are adapted to *apparent time*, this being most in use.—All the other tables are in *clock time*. The column of *Moon's Place* shows the Signs of the Zodiac or Constellation of Stars in which the Moon is situated at noon.

1. JANUARY. Begins on Saturday, has 31 days.

1859.

Moon's Phases,

	D.	H.	M.
New Moon,	4	0	30 M.
First Quarter,	12	2	27 M.
Full Moon,	18	6	53 E.
Last Quarter,	25	3	49 E.

PROB. 1.—If a right angled triangle whose base is 6 and perpendicular 8, revolve about its base, what will be the surface and solidity of the body generated?

PROB. 2.—If a right angled triangle, whose sides are 6, 8, and 10, revolve about a line perpendicular to the acute angle at the base (8). What will be the solidity and surface of the solid thus generated?

Day of Mon.	Day of Week	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec. S. °	Moon's place	Moon rises. H. M.	Moon south. H. M.	High water. H. M.
1	Sat	Circumcision. <i>Cold</i>	7 26	4 34	23	1 ♏	5 31	9 58	6 33
2	B	2d Sun af. Christmas.	7 25	4 35	22	56 ♏	6 28	10 50	7 22
3	Mon	Bt. Princeton, '77.	7 25	4 35	22	50 ♏	sets.	11 41	8 5
4	Tue	T. Nelson d. 1793.	7 24	4 36	22	44 ♏	5 8	ev. 31	8 49
5	Wed	Catiline kill. 62 B.C.	7 24	4 36	22	37 ♏	6 11	1 19	9 31
6	Thu	Epiphany. <i>cloudy</i> .	7 23	4 37	22	30 ♏	7 14	2 4	10 10
7	Fri	Liberia colon. 1822.	7 23	4 37	22	23 ♏	8 15	2 46	10 44
8	Sat	E. Whitney d. 1825.	7 22	4 38	22	15 ♏	9 17	3 28	11 20
9	B	1st Sun af. Epipha.	7 22	4 38	22	7 ♏	10 17	4 8	12 0
10	Mon	Mercury stat. <i>Snow</i>	7 21	4 39	21	58 ♏	11 17	4 50	morn.
11	Tue	Linnæus d. 1778.	7 21	4 39	21	49 ♏	morn.	5 33	0 43
12	Wed	Venus in perihelion.	7 20	4 40	21	39 ♏	0 26	6 19	1 29
13	Thu	Richard II. k. 1490.	7 19	4 41	21	29 ♏	1 35	7 10	2 23
14	Fri	☿ near Uranus.	7 18	4 42	21	19 ♏	2 49	8 8	3 23
15	Sat	☿ near ♃. <i>squalls</i> .	7 18	4 42	21	8 ♏	4 5	9 10	4 32
16	B	Moon highest.	7 17	4 43	20	57 ♏	5 19	10 17	5 43
17	Mon	Franklin b. 1706.	7 16	4 44	20	45 ♏	6 14	11 24	6 52
18	Tue	Venus high. <i>Fair</i> .	7 15	4 45	20	33 ♏	rises.	morn.	7 49
19	Wed	Moon near Saturn.	7 14	4 46	20	20 ♏	6 6	0 27	8 45
20	Thu	Bt. Cowpens, 1781.	7 13	4 47	20	8 ♏	7 25	1 26	9 36
21	Fri	♀ gt. elong. West.	7 13	4 47	19	55 ♏	8 41	2 20	10 21
22	Sat	♂ near Nept. <i>Clear</i> .	7 12	4 48	19	41 ♏	9 52	3 9	11 3
23	B	Wm. Pitt d. 1806.	7 11	4 49	19	27 ♏	11 2	3 56	11 48
24	Mon	Fred. Great b. 1712.	7 10	4 50	19	13 ♏	morn.	4 42	ev. 35
25	Tue	Conver. St. Paul.	7 9	4 51	18	58 ♏	0 8	5 28	1 24
26	Wed	Jenner died, 1823.	7 8	4 52	18	43 ♏	1 15	6 15	2 17
27	Thu	Burr's conspi. 1807.	7 7	4 53	18	28 ♏	2 21	7 4	3 15
28	Fri	Peter Great d. 1725.	7 6	4 54	18	12 ♏	3 26	7 54	4 17
29	Sat	Saturn ♄ ☉. <i>Strong</i>	7 5	4 55	17	56 ♏	4 24	8 45	5 15
30	B	Moon lowest.	7 4	4 56	17	40 ♏	5 16	9 37	6 11
31	Mon	Moon near ♄. <i>winds</i> .	7 2	4 58	17	23 ♏	5 58	10 27	7 1

2. FEBRUARY. Begins on Tuesday, has 28 days. 1859.

Moon's Phases.

	D.	H.	M.	
New Moon,	2	8	8	E.
First Quarter,	10	2	44	E.
Full Moon,	17	5	46	M.
Last Quarter,	24	9	26	M.

PROB. 3.—If the sides of any triangle be bisected and joined from these points of bisection, and the sides of the new triangle be bisected and joined as before, and so on ad infinitum; required the sum of all the triangles thus formed, the area of the first triangle being *a*.

PROB. 4.—If a segment of a circle, whose base is 4, and height 1, revolve about its base, what will be the surface and solidity of the body generated?

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec. S. S	Moon's place.	Moon rises. H. M.	Moon south. H. M.	High water. H. M.
1	Tue	Lempriere d. 1824.	7 04	59	17 6	†	6 35	11 16	7 44
2	Wed	Lor. Dow, d. 1834.	7 15	0	16 49	V3	sets.	ev. 2	8 22
3	Thu	G. Crabbe d. 1832.	6 59	5	16 31	V3	6 7	0 45	9 1
4	Fri	Rogers burnt, 1555.	5 58	5	2 16	14	7 10	1 27	9 37
5	Sat	Jupiter stat. <i>Cold</i>	6 57	5	3 15	55	8 12	2 8	10 14
6	B	Uranus stat. <i>and</i>	6 56	5	4 15	37	9 14	2 49	10 45
7	Mon	Moon near ♂. <i>severe</i> .	6 54	5	6 15	18	10 18	3 31	11 23
8	Tue	Mercury in aphelion.	6 53	5	7 15	0	11 24	4 16	morn.
9	Wed	Maschyne d. 1811.	6 52	5	8 14	40	12 00	5 4	0 8
10	Thu	Victoria mar. 1840.	6 51	5	9 14	21	0 35	5 57	0 57
11	Fri	Clinton died, 1828.	6 50	5	10 14	1	1 48	6 55	1 56
12	Sat	Moon near ♀. <i>Snow</i>	6 48	5	12 13	42	2 59	7 58	3 6
13	B	6th Sun. af. Epipha.	6 47	5	13 13	21	4 6	9 2	4 21
14	Mon	Valentine's Day. <i>or</i>	6 46	5	14 13	1	5 3	10 6	5 34
15	Tue	Moon near ♀. <i>rain</i> .	6 44	5	16 12	41	5 50	11 7	6 41
16	Wed	Melancthon b. 1497.	6 43	5	17 12	20	6 13	0 3	7 37
17	Thu	Moon eclipsed.	6 42	5	18 11	59	6 13	0 3	8 23
18	Fri	Vermont adm. 1791.	6 41	5	19 11	38	7 28	0 55	9 10
19	Sat	Florida ceded 1821.	6 39	5	21 11	17	8 40	1 44	9 53
20	B	Septuagesima Sun.	6 38	5	22 10	55	9 50	2 32	10 32
21	Mon	<i>A thaw very probable.</i>	6 37	5	23 10	34	10 59	3 19	11 12
22	Tue	Washington b. 1732.	6 35	5	25 10	12	12 00	4 7	11 59
23	Wed	Venus gt. elong. W.	6 34	5	26 9	50	0 8	4 57	ev. 50
24	Thu	Handell born, 1684.	6 33	5	27 9	28	1 13	5 47	1 45
25	Fri	Moon low. <i>Showers</i> .	6 31	5	29 9	6	2 14	6 39	2 45
26	Sat	Bonaparte l. Elb.'15.	6 30	5	30 8	48	3 9	7 31	3 48
27	B	Sexagesima Sun.	6 29	5	31 8	21	3 56	8 22	4 48
28	Mon	Moon near Uranus.	6 27	5	33 7	58	4 35	9 11	5 44

What number is that which added to itself, is twice that multiplied by itself?

3. MARCH. Begins on Tuesday, has 31 days. 1859.

Moon's Phases,

	D.	H.	M.	
New Moon,	4	2	14	E.
First Quarter,	11	11	44	E.
Full Moon,	18	4	49	E.
Last Quarter,	26	4	30	M.

PROB. 5.—Given $7^4 + y^4 - 38y + 9 = 0$ to find y by quadratics,

PROB. 6.—If a spring scale, with its contents, weigh 60 lbs. and is suspended by three chains, 2 feet long, which unite in one point of suspension, and terminate in three points of the scale, at the equal distance of 12 inches from each other,—the stress on each chain is required.

Ans. 20.89 lbs.

Day of Mon	Day of Week	Phenomena, Chronology, etc.	☉ Sun rises. H. M.	☉ Sun sets. H. M.	☉ Sun's dec. S. °	☾ Moon's place	☾ Moon rises. H. M.	☾ Moon south. H. M.	High water. H. M.
1	Tue	Czar Russia d. 1855.	6 26	5 34	7 35	☾	5 9	9 58	6 33
2	Wed	Reciproc. Tre. 1855.	6 25	5 35	7 12	☾	5 34	10 42	7 15
3	Thu	Jupiter ☐ Sun.	6 24	5 36	6 50	☾	5 58	11 25	7 50
4	Fri	1st U.S. Bank clo. 1812.	6 22	5 38	6 26	☾	sets.	ev.	7 8
5	Sat	La Place d. 1827.	6 21	5 39	6 3	☾	7 6	48	9 4
6	B	N. lights seen, 1716.	6 19	5 41	5 40	☾	8 10	1 30	9 40
7	Mon	☉ near ♄. <i>Snowy</i> ,	6 18	5 42	5 17	☾	9 16	2 14	10 17
8	Tue	♀ sup. ☉. <i>cloudy</i> ,	6 17	5 43	4 53	☾	10 26	3 2	10 57
9	Wed	Rizzio killed, 1566.	6 15	5 45	4 30	☾	11 38	3 53	11 45
10	Thu	Moon near Uranus.	6 14	5 46	4 7	☾	morn.	4 49	morn.
11	Fri	Moon near Jupiter.	6 13	5 47	3 43	☾	49	5 48	42
12	Sat	Moon highest, <i>and</i>	6 11	5 49	3 19	☾	1 54	6 51	1 46
13	B	1st Sunday in Lent.	6 10	5 50	2 56	☾	2 56	7 53	3 2
14	Mon	Bt. Guilford, 1781.	6 9	5 51	2 32	☾	3 45	8 52	4 15
15	Tue	Nept. ☉. <i>dark</i>	6 7	5 53	2 8	☾	4 24	9 48	5 24
16	Wed	Nero died, 37 A. D.	6 6	5 54	1 45	☾	4 56	10 41	6 22
17	Thu	St. Patrick d. 464.	6 4	5 56	1 21	☾	5 24	11 31	7 13
18	Fri	Stamp Act repeal. '66.	6 3	5 57	0 57	☾	rises.	morn.	7 56
19	Sat	Rheims taken, 1814.	6 2	5 58	0 34	☾	7 27	19	8 38
20	B	2d Sunday in Lent.	6 0	6 0	0 10	☾	8 39	1 7	9 22
21	Mon	Bp. Usher d. 1656.	5 59	6 1	N. 14	☾	9 47	1 56	10 1
22	Tue	Stamp Act passed, '65.	5 58	6 2	0 37	☾	10 56	2 45	10 43
23	Wed	Madrid taken, 1808.	5 56	6 4	1 1	☾	12 0	3 37	11 29
24	Thu	♀ in perihe. <i>weather</i> .	5 55	6 5	1 25	☾	morn.	4 29	ev. 21
25	Fri	☉ lowest. <i>Snow</i> .	5 54	6 6	1 48	☾	59	5 22	1 17
26	Sat	Gen. Hull tri. 1814.	5 52	6 8	2 12	☾	1 50	6 14	2 16
27	B	3rd Sunday in Lent.	5 51	6 9	2 35	☾	2 32	7 4	3 15
28	Mon	<i>Thunder showers</i> .	5 50	6 10	2 59	☾	3 7	7 52	4 15
29	Tue	Swedenborg d. '72.	5 48	6 12	3 22	☾	3 37	8 37	5 4
30	Wed	Moon near Venus.	5 47	6 13	3 45	☾	4 3	9 21	5 55
31	Thu	J. C. Calhoun d. '850.	5 46	6 14	4 9	☾	4 24	10 3	6 38

Moon's Phases.

	D.	H.	M.	
New Moon,	3	5	21	M.
First Quarter,	10	6	25	M.
Full Moon,	17	4	10	M.
Last Quarter,	24	11	49	E.

PROB. 7.—What is the solidity of a cylindrical ring, whose, inner diameter is 18 inches (= a) and the thickness 4 inches, (= b)?

PROB. 8.—The height of three towers are 28, 30, and 34 feet, which are placed at the corners of an equilateral triangle, 50 feet on a side. Where in the garden must a pole be placed, and how long will it be that it may just reach the top of each tower?

Day of Mon.	Day of Week.	Phenomena. Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec.N. S	Moon's place.	Moon rises. H. M.	Moon south. H. M.	High water. H. M.
1	Fri	All Fool's Day.	5 44	6 16	4 32	♊	4 44	10 44	7 16
2	Sat	Jefferson born, 1743.	5 43	6 17	4 55	♋	sets.	11 27	7 51
3	B	4th Sunday in Lent.	5 42	6 18	5 18	♋	7 5	ev. 11	8 31
4	Mon	☉ near ♀. <i>Fair</i> ,	5 41	6 19	5 41	♌	8 14	58	9 13
5	Tue	Moon near ♂. <i>but</i>	5 40	6 20	6 4	♌	9 25	1 48	9 56
6	Wed	Dart. masser. 1815.	5 39	6 21	6 27	♍	10 39	2 44	10 43
7	Thu	☉ near ♀. <i>chilly</i> .	5 38	6 22	6 49	♍	11 49	3 43	11 35
8	Fri	Moon highest.	5 36	6 24	7 12	♍	morn.	4 45	morn.
9	Sat	Peace proclam. '84.	5 35	6 25	7 34	♎	50	5 46	38
10	B	5th Sunday in Lent.	5 34	6 26	7 56	♎	1 41	6 46	1 43
11	Mon	☉ near ♀. <i>Warm</i>	5 32	6 28	8 18	♏	2 24	7 41	2 56
12	Tue	H. Clay born, 1777.	5 31	6 29	8 40	♏	2 57	8 33	4 0
13	Wed	Handel d. '59. <i>rains</i> .	5 30	6 30	9 2	♏	3 26	9 23	5 0
14	Thu	Bt. of Barnet, 1471.	5 28	6 32	9 24	♏	3 49	10 10	5 57
15	Fri	Dr. J. Bell, d. 1820.	5 27	6 33	9 45	♐	4 14	10 57	6 45
16	Sat	Buffon, died, 1788.	5 26	6 34	10 7	♐	rises.	11 45	7 28
17	B	Franklin died, 1790.	5 25	6 35	10 28	♐	7 27	morn.	8 10
18	Mon	Byron died, 1824.	5 23	6 37	10 49	♐	8 36	34	8 52
19	Tue	Bt. Lexington, '75.	5 22	6 38	11 10	♑	9 44	1 25	9 35
20	Wed	Geo. Clinton d. '812.	5 21	6 39	11 30	♑	10 47	2 18	10 26
21	Thu	☉ lowest. <i>Stormy</i>	5 19	6 41	11 51	♑	11 42	3 11	11 6
22	Fri	Mercury Inf. ♂ Sun.	5 18	6 42	12 11	♒	morn.	4 5	11 57
23	Sat	Shakspeare d. 1616.	5 17	6 43	12 31	♒	28	4 56	ev. 49
24	B	Easter Day.	5 16	6 44	12 51	♒	1 7	5 45	1 42
25	Mon	Venus & Neptune.	5 15	6 45	13 11	♓	1 37	6 31	2 36
26	Tue	♄ ☐ ☉. <i>weather</i> .	5 13	6 47	13 30	♓	2 4	7 15	3 29
27	Wed	Mars & Uranus.	5 12	6 48	13 49	♓	2 27	7 57	4 20
28	Thu	Bat. Benning. '77.	5 11	6 49	14 8	♓	2 46	8 38	5 7
29	Fri	☉ & ♀. <i>Pleasant</i> .	5 10	6 50	14 27	♓	3 7	9 20	5 53
30	Sat	Washington in. '89.	5 8	6 52	14 46	♓	3 29	10 3	6 38

5. MAY.

Begins on Sunday, has 31 days.

1859.

Moon's Phases,

	D.	H.	M.	
New Moon,	2	5	8	E.
First Quarter,	9	0	3	E.
Full Moon,	16	4	1	E.
Last Quarter,	24	5	53	E.

PROB. 9.—Given $y^4 - x^4 = 148(x+y)$ and $60y^2 - 49x^2 = 49xy$ to find x and y by quadratic equations.

PROB. 10.—The hypotenuse of a right-angled triangle is 29, and the difference between two lines drawn from the acute angles to the centre of the inscribed circle is $(2\sqrt{2} - 3\sqrt{29})$: required the legs and the radius.

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec.N. °	Moon's place.	Moon rises. H. M.	Moon south. H. M.	High water. H. M.
1	B	1st Sun. after Easter.	5 6	6 54	15 4	☾	3 53	10 49	7 21
2	Mon	Jamaica dis. 1494.	5 5	6 55	15 22	☾	sets.	11 39	8 4
3	Tue	Bat. Lutzen, 1813.	5 4	6 56	15 40	☾	8 23	ev. 34	8 52
4	Wed	Venus in aphe. <i>Fair</i>	5 3	6 57	15 57	☾	9 36	1 33	9 44
5	Thu	Moon near ♄. <i>and</i>	5 2	6 58	16 15	☾	10 43	2 36	10 36
6	Fri	Moon high. <i>warm.</i>	5 1	6 59	16 32	☾	11 37	3 39	11 31
7	Sat	Gen. Worth d. 1849.	5 0	7 0	16 48	☾	morn.	4 41	morn.
8	B	2nd Sun. af. Easter.	4 59	7 1	17 5	☾	0 23	5 38	0 32
9	Mon	Schiller died, 1805.	4 57	7 3	17 21	☾	1 0	6 30	1 35
10	Tue	Bank Panic, 1837.	4 56	7 4	17 37	☾	1 28	7 20	2 35
11	Wed	R. T. Paine d. 1814.	4 55	7 5	17 52	☾	1 54	8 7	3 36
12	Thu	Bt. Palo Alto, 1846.	4 54	7 6	18 8	☾	2 20	8 53	4 30
13	Fri	<i>Summer weather.</i>	4 53	7 7	18 23	☾	2 42	9 39	5 25
14	Sat	H. Grattan d. 1820.	4 52	7 8	18 37	☾	3 5	10 27	6 12
15	B	D. O'Connell d. 1847.	4 52	7 8	18 52	☾	3 33	11 16	7 1
16	Mon	Puebla cap. 1847.	4 51	7 9	19 6	☾	rises.	morn.	7 46
17	Tue	John Jay d. 1829.	4 50	7 10	19 19	☾	8 32	0 8	8 28
18	Wed	Moon low. <i>Rainy,</i>	4 49	7 11	19 33	☾	9 30	1 1	9 16
19	Thu	♄ gt. elong. West.	4 48	7 12	19 46	♄	10 20	1 55	10 1
20	Fri	La Fayette d. 1834.	4 47	7 13	19 59	♄	11 0	2 47	10 44
21	Sat	Bat. Essling, 1809.	4 46	7 14	20 11	♄	11 36	3 38	11 30
22	B	4th Sun. aft. Easter.	4 45	7 15	20 23	☾	morn.	4 25	ev. 17
23	Mon	Livingston d. 1836.	4 45	7 15	20 35	☾	0 4	5 9	1 2
24	Tue	Copernicus d. 1543.	4 44	7 16	20 46	☾	0 27	5 52	1 51
25	Wed	Uranus ☿ <i>warm.</i>	4 43	7 17	20 57	☾	0 48	6 33	2 37
26	Thu	Moon near Neptune.	4 42	7 18	21 8	☾	1 10	7 13	3 25
27	Fri	Margaret beh. 1541.	4 42	7 18	21 18	☾	1 30	7 55	4 18
28	Sat	N. Webster d. 1843.	4 41	7 19	21 28	☾	1 52	8 39	5 10
29	B	Moon near ♀. <i>Clear.</i>	4 40	7 20	21 37	☾	2 18	9 27	6 1
30	Mon	Moon near Mercury.	4 40	7 20	21 46	☾	2 51	10 20	6 54
31	Tue	Moon near Uranus.	39 7	21 21	55	☾	sets.	11 18	7 48

Moon's Phases.

	D.	H.	M.	
New Moon,	1	2	14	M.
First Quarter,	7	5	52	E.
Full Moon,	5	5	22	M.
Last Quarter,	23	9	36	M.
New Moon,	30	9	45	M.

PROB. 11.—In a given circle, inscribe an equilateral triangle, and within, this triangle, describe a circle, etc.—then if r = radius of the first circle, find the sum of areas of all the triangles and circles ad infinitum.

PROB. 12.—Three equal circles touch each other externally, and enclose between the points of contact a acres. What are the radii of the circles?

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec. N. S	Moon's place.	Moon sets. H. M.	Moon south. H. M.	High water. H. M.
1	Wed	Moon near Mars.	4 38	7 22	22 3	♈	8 27	ev. 21	8 40
2	Thu	Moon near Jupiter.	4 38	7 22	22 11	♈	9 29	1 26	9 36
3	Fri	Dr. Harvey d. 1657.	4 37	7 23	22 19	♈	10 19	2 30	10 30
4	Sat	Moon near Saturn.	4 37	7 23	22 26	♈	10 59	3 30	11 22
5	B	1st Balloon rai. '783.	4 36	7 24	22 33	♈	11 31	4 26	morn.
6	Mon	Gen. Gaines d. 1849.	4 36	7 24	22 40	♈	11 58	5 17	0 18
7	Tue	Mars near Jupiter.	4 35	7 25	22 46	♈	morn.	6 5	1 11
8	Wed	Thos. Paine d. 1809.	4 35	7 25	22 51	♈	0 22	6 51	2 4
9	Thu	Jackson died, 1845.	4 35	7 25	22 56	♈	0 46	7 37	3 2
10	Fri	Dutch land. N. Y. 1667.	4 34	7 26	23 1	♈	1 9	8 24	3 55
11	Sat	St. Barnabas. <i>Clear</i>	4 34	7 26	23 6	♈	1 36	9 12	4 51
12	B	Whit Sunday. <i>and</i>	4 34	7 26	23 10	♈	2 5	10 2	5 45
13	Mon	Bt. Carcagen. 1813.	4 33	7 27	23 13	♈	2 40	10 54	6 37
14	Tue	Moon lowest. <i>warm.</i>	4 33	7 27	23 17	♈	rises.	11 48	7 25
15	Wed	J. K. Polk d. 1849.	4 33	7 27	23 19	♈	8 15	morn.	8 9
16	Thu	War declared 1812.	4 33	7 27	23 22	♈	8 59	0 40	8 57
17	Fri	Bt. Bunker Hill, 1775.	4 33	7 27	23 24	♈	9 36	1 31	9 41
18	Sat	Neptune ☐ ☉. <i>Dry.</i>	4 32	7 28	23 25	♈	10 5	2 20	10 22
19	B	Trinity Sunday.	4 32	7 28	23 26	♈	10 32	3 5	11 0
20	Mon	Mercury in perihe.	4 32	7 28	23 27	♈	10 53	3 48	11 40
21	Tue	Summer begins.	4 32	7 28	23 28	♈	11 13	4 29	ev. 21
22	Wed	♀ ☿ ♀. ♀ sup. ☿ ☉.	4 32	7 28	23 27	♈	11 33	5 9	1 1
23	Thu	Mercury ☿ Jupiter.	4 32	7 28	23 21	♈	11 53	5 50	1 45
24	Fri	Printing disc. 1440.	4 32	7 28	23 26	♈	morn.	6 32	2 37
25	Sat	♀ ☿ Sun. <i>Rainy.</i>	4 32	7 28	23 25	♈	0 17	7 16	3 30
26	B	1st Sun. af. Trinity.	4 33	7 27	23 23	♈	0 44	8 6	4 29
27	Mon	Cholera, N. Y. 1832.	4 33	7 27	23 21	♈	1 17	9 0	5 32
28	Tue	♂ ☿ Mars. ☉ ☿ ♀.	4 33	7 27	23 18	♈	2 2	10 1	6 36
29	Wed	Moon near Jupiter.	4 33	7 27	23 15	♈	sets.	11 5	7 36
30	Thu	Moon near ♂. <i>Fair.</i>	4 33	7 27	23 12	♈	8 7	ev. 11	8 31

7. JULY.

Begins on Friday, has 31 days.

1859.

Moon's Phases,

D. H. M.

First Quarter, 7 0 58 M.

Full Moon, 14 7 67 E.

Last Quarter, 22 10 32 E.

New Moon, 29 4 48 E.

PROB. 13.—If a triangle whose base is 8, and the other two sides 4 and 6, revolve about the base, what will be the surface and solidity of the body produced?

PROB. 14.—If a circle two feet in diameter revolve around a line tangent to its circumference, what will be the surface and solidity of the body produced?

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	☉ Sun rises. H. M.	☉ Sun sets. H. M.	☉ Sun's dec. N. °	☾ Moon's place.	☾ Moon sets. H. M.	☾ Moon south. H. M.	High water. H. M.
1	Fri	Massacre Wyo. '78.	4 34	7 26	23 8	Π	8 50	1 15	9 28
2	Sat	Sun in apogee. <i>Dry.</i>	4 34	7 26	23 4	Π	9 31	2 15	10 18
3	B	2d Sun. af. Trinity.	4 34	7 26	22 59	Π	9 59	3 9	11 3
4	Mon	INDEPENDENCE, '76.	4 35	7 25	22 54	Ω	10 25	4 0	11 52
5	Tue	Bt. Chip'way, 1814.	4 35	7 25	22 49	Ω	10 49	4 48	morn.
6	Wed	Bt. Wagram, 1809.	4 36	7 24	22 43	Π	11 12	5 35	0 40
7	Thu	Bt. Skenesboro, '77.	4 36	7 24	22 37	Π	11 38	6 22	1 31
8	Fri	Gen. Taylor d. 1850.	4 37	7 23	22 30	Π	morn.	7 9	2 26
9	Sat	Braddock's de. '755.	4 37	7 23	22 23	Π	0 7	7 59	3 20
10	B	3d Sun. af. Trinity.	4 38	7 22	22 16	Π	0 40	8 50	4 22
11	Mon	Hamilton shot, 1804	4 38	7 22	22 8	Π	1 19	9 43	5 21
12	Tue	Moon lowest. <i>Rain,</i>	4 39	7 21	20 0	Π	2 8	10 36	6 18
13	Wed	S. Hopkins d. 1785.	4 39	7 21	21 52	↑	3 2	11 27	7 10
14	Thu	Saturn ♂ ♄. <i>with</i>	4 40	7 20	21 43	↑	rises.	morn.	7 52
15	Fri	Bonaparte ta. 1815.	4 41	7 19	21 34	♊	8 8	0 16	8 36
16	Sat	Stony Pt. ta. 1779.	4 41	7 19	21 24	♊	8 35	1 2	9 17
17	B	John Carr, d. 1832.	4 42	7 18	21 14	♊	8 57	1 46	9 54
18	Mon	Bat. Warsaw. 1656.	4 43	7 17	21 4	♋	9 17	2 27	10 27
19	Tue	Bt. Paulus H'k, '79.	4 43	7 17	20 53	♋	9 38	3 7	10 2
20	Wed	Venus ♂ ♀. <i>thunder.</i>	4 44	7 16	20 42	♋	9 58	3 47	11 39
21	Thu	Mars ♂ Sun. <i>Hot</i>	4 45	7 15	20 31	♋	10 19	4 28	ev. 20
22	Fri	Venus in ♋. <i>and</i>	4 46	7 14	20 19	♋	10 44	5 11	1 5
23	Sat	Bt. Bridgewa. 1814.	4 47	7 13	20 7	♌	11 14	5 57	1 56
24	B	♀ in ♋. <i>sultry.</i>	4 47	7 13	19 54	♌	11 52	6 47	2 53
25	Mon	Moon ♂ Uranus.	4 48	7 12	19 42	♌	morn.	7 43	4 3
26	Tue	Moon highest.	4 49	7 11	19 29	♌	0 40	8 44	5 14
27	Wed	Moon near ♀. <i>Cool.</i>	4 50	7 10	19 15	Π	1 44	9 49	6 24
28	Thu	Moon near Venus.	4 51	7 9	19 1	Π	2 57	10 54	7 25
29	Fri	Sun elipsed, visible.	4 52	7 8	18 47	♍	sets.	11 56	8 16
30	Sat	Moon near Saturn.	4 53	7 7	18 33	♍	7 43	ev. 55	9 10
31	B	♀ gt. elong. East	4 54	7 6	18 18	♍	8 27	-1 49	9 56

Moon's Phases,

	D.	H.	M.
First Quarter,	5	10	26 M.
Full Moon,	13	11	40 M.
Last Quarter,	21	8	50 M.
New Moon,	27	11	30 E.

PROB. 19.—What per cent of the capital, would be the *increase* for a year, at 5 per cent. per annum, if the interest at the end of every second should be placed as capital, and be on interest?

PROB. 20.—From the corners of a triangle to the centre of the inscribed circle, are 6, 7, and 8; what are the sides of the triangle, and the radius of inscribed circle?

Day of Mon	Day of Week	Phenomena, Chronology, etc.	☉		☽		☿		Moon's place.	☾		♊		High water.
			Sun rises.	H. M.	Sun sets.	H. M.	Sun's dec.	N.		Moon sets.	H. M.	Moon south.	H. M.	
1	Mon	Bat. Nile, 1798.	4	55	7	5	18	4	♊	8	50	2	39	10 38
2	Tue	Bt. Blenheim, 1704.	4	56	7	4	17	48	♊	9	15	3	28	11 20
3	Wed	♂ in aphe. <i>Clear</i>	4	57	7	3	17	33	♊	9	41	4	16	morn.
4	Thu	Wm. Floyd, d. 1821.	4	58	7	2	17	17	♊	10	8	5	5	8
5	Fri	Bt. Brownst'n, 1812.	4	59	7	1	17	0	♊	10	40	5	55	58
6	Sat	B. Johnson, d. 1637.	5	0	7	0	16	44	♊	11	18	6	46	1 54
7	B	7th. Sun. af. Trin.	5	1	6	59	16	28	♊	morn.	7	39	2	54
8	Mon	♂ near Sun. <i>and</i>	5	2	6	58	16	11	♊	4	8	32	3	57
9	Tue	Moon low. <i>windy.</i>	5	3	6	57	15	54	♊	57	9	23	4	59
10	Wed	Bt. St. Quintin, '557.	5	4	6	56	15	36	♊	1	54	10	13	5 57
11	Thu	Savannah evac. '82.	5	6	6	54	15	19	♊	2	54	11	0	6 48
12	Fri	A. Galatin, d. 1849.	5	7	6	53	15	1	♊	rises.	11	45	7	31
13	Sat	Cortez t. Mex. 1521.	5	8	6	52	14	43	♊	7	2	morn.	8	9
14	B	♂ stat. <i>Strong</i>	5	9	6	51	14	24	♊	7	22	27	8	45
15	Mon	Fort Erie tak. 1814.	5	10	6	50	14	6	♊	7	43	1	7	9 22
16	Tue	♂ near Nept. <i>winds.</i>	5	11	6	49	13	47	♊	8	4	1	47	9 52
17	Wed	Comet of 1682.	5	13	6	47	13	27	♊	8	25	2	27	10 27
18	Thu	Santa Fee oc. 1846.	5	14	6	46	13	8	♊	8	49	3	9	11 4
19	Fri	Thebes des. 325 B. c.	5	15	6	45	12	49	♊	9	15	3	53	11 45
20	Sat	♂ near ♀. <i>Showers.</i>	5	16	6	44	12	29	♊	9	48	4	41	ev. 34
21	B	9th Sun. after Trin.	5	17	6	43	12	9	♊	10	32	5	33	1 29
22	Mon	Moon high. <i>Cool</i>	5	19	6	41	11	49	♊	11	25	6	31	2 36
23	Tue	(24th) ♀ in perihe.	5	20	6	40	11	29	♊	morn.	7	32	3	49
24	Wed	Moon near ♄. <i>and</i>	5	21	6	39	11	9	♊	32	8	35	5	2
25	Thu	Herschell, d. 1822.	5	22	6	38	10	48	♊	1	48	9	37	6 11
26	Fri	♂ near ♀, ♂, and ♀.	5	23	6	37	10	27	♊	3	8	10	36	7 10
27	Sat	♂ near ♀. <i>pleasant.</i>	5	25	6	35	10	6	♊	sets.	11	32	7	57
28	B	♂ Inf. ♂ Sun.	5	26	6	34	9	45	♊	6	49	ev.	25	8 44
29	Mon	Bat. Mohatz, 1527.	5	27	6	33	9	24	♊	7	16	1	16	9 29
30	Tue	Cleopatra d. 30 B. c.	5	29	6	31	9	2	♊	7	41	2	6	10 12
31	Wed	Venus ♂ ♀. <i>Rain.</i>	5	30	6	30	8	41	♊	8	9	2	56	10 51

9. SEPTEMBER. Begins on Thursday, has 30 days. 1859.

Moon's Phases.

	D.	H.	M.	
First Quarter,	3	11	9	E.
Full Moon,	12	3	35	M.
Last Quarter,	19	5	18	E.
New Moon,	26	9	0	M.

PROB. 21.—If the triangle in Problem 17 revolve about a line perpendicular to either end of the base, what will be the surface and solidity of the bodies generated?

PROB. 22.—If an ellipse whose transverse and conjugate diameters are 6 and 4 feet, revolve about its transverse axis, what will be the surface and solidity of the spheroid thus produced?

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec. N. S	Moon's place.	Moon sets. H. M.	Moon south. H. M.	High water. H. M.
1	Thu	Creation, 5508 B. C.	5 31	6 29	8 19	♏	8 38	3 47	11 39
2	Fri	Fire in Lond. 1666.	5 33	6 27	7 57	♏	9 16	4 39	morn.
3	Sat	Bat. Dunbar, 1650.	5 34	6 26	7 35	♏	9 59	5 32	31
4	B	☉ low. <i>Exceedingly</i>	5 35	6 25	7 13	♏	10 48	6 26	1 28
5	Mon	Cromwell d. 1658.	5 36	6 24	6 51	♏	11 45	7 18	2 31
6	Tue	♀ near Mars. <i>warm</i>	5 38	6 22	6 29	♏	morn.	8 9	3 32
7	Wed	Euler d. 1783. <i>and</i>	5 39	6 21	6 6	♏	47	8 57	4 32
8	Thu	Fall of Sebasto. 1855.	5 40	6 20	5 44	♏	1 48	9 42	5 29
9	Fri	Bat. Eutaw, 1781.	5 42	6 18	5 21	♏	2 51	10 25	6 16
10	Sat	Bt. Lake Erie, 1813	5 43	6 17	4 58	♏	3 52	11 6	6 59
11	B	12th Sun. af. Trin.	5 44	6 16	4 35	♏	rises.	11 47	7 37
12	Mon	Bt. Fort McHenry.	5 46	6 14	4 13	♏	6 10	morn.	8 10
13	Tue	♀ gt. elong. West.	5 47	6 13	3 50	♏	6 30	27	8 45
14	Wed	♀ near Mars. <i>dry</i> .	5 48	6 12	3 27	♏	6 53	1 8	9 23
15	Thu	N. Y. taken, '76.	5 50	6 10	3 3	♏	7 19	1 52	9 58
16	Fri	♀ in periheli. <i>Some</i>	5 51	6 9	2 40	♏	7 51	2 39	10 38
17	Sat	Quebec taken, '59.	5 52	6 8	2 17	♏	8 30	3 29	11 21
18	B	Deerfield brt. 1675.	5 54	6 6	1 54	♏	9 21	4 24	ev. 16
19	Mon	Neptune ♀ ☉. <i>rain</i>	5 55	6 5	1 31	♏	10 21	5 22	1 17
20	Tue	Moon high. <i>may be</i>	5 56	6 4	1 7	♏	11 28	6 23	2 28
21	Wed	Moon ♂ ♃. <i>expected.</i>	5 58	6 2	0 44	♏	morn.	7 23	3 39
22	Thu	Bt. Mycale, 479 B. C.	5 59	6 1	0 20	♏	45	8 22	4 48
23	Fri	Moon near Saturn.	6 06	0	S. 3	♏	2 3	9 18	5 51
24	Sat	Monterey ta. 1846.	6 25	58	0 26	♏	3 22	10 11	6 46
25	B	14th Sun. af. Trin.	6 35	57	0 50	♏	sets.	11 2	7 33
26	Mon	Philadel. taken, '77.	6 45	56	1 13	♏	5 39	11 52	8 12
27	Tue	Venus sup. ♂ Sun.	6 65	54	1 37	♏	6 6	ev. 42	8 59
28	Wed	Bt. Mara. 490 B. C.	6 75	53	2 0	♏	6 37	1 34	9 44
29	Thu	Tourney, ta. 1513.	6 85	52	2 23	♏	7 11	2 27	10 27
30	Fri	Pompey's vic. 61 B. C.	6 105	50	2 47	♏	7 53	3 21	11 14

10. OCTOBER. Begins on Saturday, has 31 days. 1859.

Moon's Phases,

	D.	H.	M.	
First Quarter,	3	3	36	E.
Full Moon,	11	6	56	E.
Last Quarter,	19	0	47	M.
New Moon,	25	7	37	E.

PROB. 23.—The length of three poles are 40, 43, and 45 feet. Their tops are raised and tied together, and their bottoms stand on the corners of an equilateral triangle 32 feet on a side. What will be the height of their tops?

PROB. 24.—What is the sum of the infinite series $x + \frac{x}{x+1} + \frac{x}{(x+1)^2} + \frac{x}{(x+1)^3} + \dots$?

$$(x+1)^1 (x+1)^2 (x+1)^3$$

Day of Mon	Day of Week	Phenomena, Chronology, etc.	☉ Sun rises. H. M.	☉ Sun sets. H. M.	☉ Sun's dec. S. °	☾ Moon's place	☾ Moon sets. H. M.	☾ Moon south. H. M.	High water. H. M.
1	Sat	1st Steamboat, '807.	6 11	5 49	3 10	☾	8 41	4 16	morn.
2	B	Moon lowest. <i>Cold</i>	6 12	5 48	3 33	☾	9 36	5 10	0 8
3	Mon	Bt. Waterbury, '813.	6 14	5 46	3 57	☾	10 36	6 2	1 4
4	Tue	Bt. Germant'wn, '77.	6 15	5 45	4 20	☾	11 40	6 52	2 1
5	Wed	Judge Buel, d. 1839.	6 16	5 44	4 43	☾	morn.	7 38	3 3
6	Thu	A. Murray, d. 1821.	6 18	5 42	5 6	☾	0 40	8 22	3 58
7	Fri	E. A. Poe, d. 1849.	6 19	5 41	5 29	☾	1 42	9 3	4 48
8	Sat	♂ in apheli. <i>rains.</i>	6 20	5 40	5 52	☾	2 44	9 44	5 35
9	B	Bat. Savannah, '79.	6 22	5 38	6 15	☾	3 44	10 25	6 18
10	Mon	♀ sup. ♂ ☉. <i>Cold</i>	6 23	5 37	6 38	☾	4 44	11 6	6 58
11	Tue	Bahamas dis. 1492.	6 24	5 36	7 1	☾	rises.	11 49	7 37
12	Wed	Bt. Wexford, 1649.	6 26	5 34	7 23	☾	5 23	morn.	8 10
13	Thu	Bt. Queenston, 1812.	6 27	5 33	7 46	☾	5 54	0 36	8 53
14	Fri	Bank Panic, N.Y. 1857.	6 28	5 32	8 8	☾	6 30	1 26	9 36
15	Sat	☉ ♂ ☿. <i>nights.</i>	6 30	5 30	8 31	☾	7 15	2 20	10 21
16	B	20th Sun. af. Trin.	6 31	5 29	8 53	☾	8 13	3 17	11 11
17	Mon	☿ ☐ ☉. <i>Frost may</i>	6 33	5 28	9 15	☾	9 20	4 17	ev. 9
18	Tue	Moon ♂ ☿. <i>come.</i>	6 34	5 26	9 37	☾	10 32	5 17	1 12
19	Wed	Venus ♂ Mercury.	6 35	5 25	9 59	☾	11 47	6 15	2 17
20	Thu	Bt. Salamis, 480, B.C.	6 36	5 24	10 20	☾	morn.	7 10	3 23
21	Fri	W. Scott, d. 1832.	6 38	5 22	10 42	☾	1 4	8 2	4 25
22	Sat	Bat. Buxar, 1764.	6 39	5 21	11 3	☾	2 18	8 52	5 24
23	B	Moon ♂ ♂. <i>Rainy</i>	6 40	5 20	11 24	☾	3 31	9 41	6 15
24	Mon	D. Webster, d. 1852.	6 41	5 19	11 45	☾	4 44	10 30	7 4
25	Tue	Macedonian cap. '12.	6 43	5 17	12 6	☾	sets.	11 21	7 46
26	Wed	Moon near ♀. <i>and</i>	6 44	5 16	12 27	☾	5 6	ev. 13	8 32
27	Thu	Capt. Cook, b. 1728.	6 45	5 15	12 47	☾	5 45	1 7	9 22
28	Fri	Alfred Great, d. 900.	6 46	5 14	13 7	☾	6 31	2 3	10 9
29	Sat	☉ lowest. <i>dark.</i>	6 48	5 12	13 27	☾	7 25	2 58	10 53
30	B	22nd Sun af. Trin.	6 49	5 11	13 47	☾	8 24	3 52	11 44
31	Mon	Mercury in Apheli.	6 50	5 10	14 7	☾	9 26	4 44	morn.

11. NOVEMBER. Begins on Tuesday, has 30 days. 1859.

Moon's Phases.

	D.	H.	M.	
First Quarter,	2	11	22	M.
Full Moon,	10	9	9	M.
Last Quarter,	17	8	11	M.
New Moon,	24	8	47	M.

PROB. 25.—Required the centrifugal force of a fly-wheel, 15 feet in diameter, making forty revolutions in a minute, the weight of the ring being 3 tons?

PROB. 26.—The ratio of two sides of a triangle is as 6 to 5, and the segments of the base, made by a perpendicular falling from the vortex, are 18 and 7; what are the sides?

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec. S. S	Moon's place.	Moon rises. H. M.	Moon south. H. M.	High water. H. M.
1	Tue	All Saints. <i>Cold.</i>	6 51	5 8	14 26	♄	10 29	5 32	0 36
2	Wed	Bt. French Ck. 1813.	6 53	5 7	14 45	♄	11 29	6 16	1 28
3	Thu	Jean d'Acre bom. 1840.	6 54	5 6	15 4	♄	morn.	6 59	2 18
4	Fri	St Clair's def. 1791.	6 55	5 5	15 23	♄	0 30	7 39	3 10
5	Sat	Powder Plot, 1607.	6 56	5 4	15 41	♄	1 30	8 20	3 58
6	B	♄♂ Nept. <i>Warm</i>	6 57	5 3	15 59	♄	2 31	9 1	4 46
7	Mon	Pensacola ta. 1814.	6 58	5 2	16 17	♄	3 32	9 43	5 33
8	Tue	Magdeburg ta. 1806.	7 0	5 0	16 35	♄	4 36	10 28	6 17
9	Wed	Luther b. 1683.	7 1	4 59	16 52	♄	rises.	11 18	7 2
10	Thu	Venus in ♊. <i>for the</i>	7 2	4 58	17 9	♄	4 26	morn.	7 46
11	Fri	Moon near Uranus.	7 3	4 57	17 26	♄	5 12	11	8 30
12	Sat	Jupiter stat. <i>season.</i>	7 4	4 56	17 42	♄	6 6	1 9	9 24
13	B	21st San. af. Trinity.	7 5	4 55	17 59	♄	7 11	2 10	10 14
14	Mon	Chs. Carroll d. 1832.	7 6	4 54	18 14	♄	8 23	3 11	11 5
15	Tue	Moon near Jupiter.	7 7	4 53	18 30	♄	9 36	4 10	ev 2
16	Wed	Ferguson d. 1776.	7 8	4 52	18 45	♄	10 53	5 6	59
17	Thu	Moon near ♄. <i>Rain</i>	7 9	4 51	19 0	♄	morn.	5 58	1 57
18	Fri	Saturn ☐ Sun.	7 10	4 50	19 14	♄	0 6	6 48	2 56
19	Sat	Jay's Treaty, 1794.	7 11	4 49	19 28	♄	1 19	7 36	3 53
20	B	Bt. Belle Isle, 1759.	7 12	4 48	19 42	♄	2 29	8 24	4 51
21	Mon	Moon near Mars.	7 13	4 47	19 56	♄	3 40	9 12	5 45
22	Tue	Q. Mary sen. 1586.	7 14	4 46	20 9	♄	4 51	10 2	6 37
23	Wed	Bat. Crevett, 1785.	7 15	4 45	20 22	♄	sets.	10 55	7 26
24	Thu	Moon lowest. <i>Fair</i>	7 15	4 45	20 34	♄	4 23	11 50	8 10
25	Fri	♄gt. elong. E. ♄♂♀.	7 16	4 44	20 46	♄	5 14	ev. 46	9 3
26	Sat	Moon♂ Mercury.	7 17	4 43	20 57	♄	6 11	1 41	9 50
27	B	1st Sun in Advent.	7 18	4 42	21 9	♄	7 2	2 34	10 34
28	Mon	Uranus ♄♂. <i>Mild.</i>	7 19	4 41	21 19	♄	8 15	3 24	11 16
29	Tue	Rev. Warsaw, 1830.	7 19	4 41	21 30	♄	9 18	4 10	morn.
30	Wed	Euripides d. 406 B.C.	7 20	4 40	21 40	♄	10 18	4 53	0 2

12. DECEMBER. Begins on Thursday, has 31 days. 1859.

Moon's Phases,

	D.	H.	M.	
First Quarter,	2	8	54	M.
Full Moon,	9	10	17	E.
Last Quarter,	16	4	20	E.
New Moon,	24	0	51	M.

PROB. 27.—If a semicircle whose radius is 1, revolve around a line tangent to the middle of its arc, what will be the surface and solidity of the body generated?

PROB. 28.—The lengths of two lines drawn from the acute angles to the middle of the opposite sides are *a* and *b*; what are the sides of the right-angled triangle?

Day of Mon.	Day of Week.	Phenomena, Chronology, etc.	Sun rises. H. M.	Sun sets. H. M.	Sun's dec. S. °	Moon's place.	Moon sets. H. M.	Moon south. H. M.	High water. H. M.
1	Thu	Bat. Nineveh, 627.	7 21	4 39	21 49	☾	11 19	5 34	0 46
2	Fri	Napoleon crown. '04.	7 21	4 39	21 58	☾	morn.	6 14	1 30
3	Sat	☿ near Nept. <i>Cold</i>	7 22	4 38	22 7	☾	0 18	6 54	2 16
4	B	2d Sun. in Advent.	7 23	4 37	22 15	☾	1 18	7 35	3 5
5	Mon	Venus near ♀. <i>and</i>	7 23	4 37	22 23	☾	2 19	8 19	3 52
6	Tue	Nept. stat. <i>dreary</i> .	7 24	4 36	22 31	☾	3 24	9 6	4 44
7	Wed	Ney shot, 1815.	7 24	4 36	22 38	☾	4 32	9 58	5 38
8	Thu	Mercury in ♄.	7 25	4 35	22 44	☾	5 43	10 54	6 33
9	Fri	Moon in ♄. <i>Severe</i>	7 25	4 35	22 50	☾	rises.	11 55	7 25
10	Sat	Moon highest. <i>for</i>	7 25	4 35	22 56	☾	4 55	morn.	8 15
11	B	Indiana ad. 1816.	7 26	4 34	23 1	☾	6 7	0 58	9 13
12	Mon	Moon ♂ Jupiter. <i>the</i>	7 26	4 34	23 6	☾	7 26	2 1	10 7
13	Tue	♀ in perihe. <i>season</i> .	7 26	4 34	23 10	☾	8 43	2 59	10 54
14	Wed	♀ Inf. ♂ ☿. ☿♂♂.	7 27	4 33	23 14	☾	9 57	3 54	11 46
15	Thu	Venus in aphelion.	7 27	4 33	23 17	☾	11 9	4 45	ev. 37
16	Fri	Gt. Fire, N.Y. 1835.	7 27	4 33	23 20	☾	morn.	5 34	1 30
17	Sat	Bolivar died, 1830.	7 27	4 33	23 23	☾	0 20	6 21	2 25
18	B	4th Sun. in Advent.	7 28	4 32	23 24	☾	1 31	7 9	3 20
19	Mon	Moon ♂ ♀. <i>Snows</i>	7 28	4 32	23 26	☾	2 41	7 58	4 21
20	Tue	Vitellius k. 69 A.D.	7 28	4 32	23 27	☾	3 51	8 48	5 17
21	Wed	St. Thomas. <i>and</i>	7 28	4 32	23 27	☾	4 59	9 41	6 15
22	Thu	Winter begins.	7 28	4 32	23 27	☾	6 7	10 36	7 10
23	Fri	Moon lowest.	7 28	4 32	23 27	☾	sets.	11 31	7 56
24	Sat	Mercury stat. <i>blows</i> .	7 28	4 32	23 26	♄	4 59	ev. 25	8 43
25	B	Christmas Day.	7 28	4 32	23 25	♄	6 1	1 16	9 29
26	Mon	St. Stephen. <i>Clear</i> .	7 27	4 33	23 23	☾	7 6	2 4	10 16
27	Tue	St. John d. 100 A.D.	7 27	4 33	23 21	☾	8 7	2 48	10 45
28	Wed	Bt. Trenton, 1776.	7 27	4 33	23 18	☾	9 7	3 30	11 22
29	Thu	Savannah ta. 1778.	7 27	4 33	23 15	☾	10 6	4 10	morn.
30	Fri	Buffalo burnt, 1813.	7 27	4 33	23 11	☾	11 6	4 50	0 2
31	Sat	Give Good Presents.	7 26	4 34	23 7	☾	morn.	5 31	0 42

HERSCHEL'S WEATHER TABLE.

17

For foretelling the Weather, through all the Lunations of each Year, for ever.

This table and the accompanying remarks are the result of many years' actual observation, the whole being constructed on a due consideration of the attraction of the sun and moon, in their several positions respecting the earth, and will by simple inspection show the observer what kind of weather will most probably follow the entrance of the moon into any of its quarters, and that so near the truth as to be seldom or never found to fail.

If the new moon, the first quarter, the full moon or last quarter happens	IN SUMMER.	IN WINTER.
Between midnight and 2 in the morning.	Fair.	Hard frost, unless the wind is S. or W.
— 2 and 4, morning,	Cold, w'h freq't show'rs.	Snowy and Stormy.
— 4 and 6, "	Rain.	Rain.
— 6 and 8, "	Wind and Rain	Stormy.
— 8 and 10, "	Changeable.	Cold rain, if the wind be W., snow if E.
— 10 and 12, "	Frequent showers.	Cold, and high wind.
At 12 o'clock at noon, and 2 P.M.,	Very rainy.	Snow or rain.
Between 2 and 4 P.M.	Changeable.	Fair and mild.
— 4 and 6, "	Fair.	Fair.
— 6 and 8, "	Fair, if wind N. W., Rainy, if S. or S. W.	Fair and frosty, if the wind is N. or N. E.
— 8 and 10, "	Ditto.	Rain or snow, if S. or S. W.
— 10 and midnight.	Fair.	Ditto. Fair and frosty.

OBSERVATIONS.—1. The nearer the time of the moon's change, first quarter, full, and last quarter, are to *midnight*, the fairer will the weather be during the seven days following.

2. The space for this calculation occupies from ten at night till two next morning.

3. The nearer to *mid-day*, or *noon*, the phases of the moon happen, the more foul or wet weather may be expected during the next seven days.

4. The space for this calculation occupies from ten in the forenoon to two in the afternoon. These observations refer principally to the summer, though they affect spring and autumn nearly in the same ratio.

5. The moon's change, first quarter, full, and last quarter, happening during six of the afternoon hours, i. e. from four to ten, may be followed by fair weather; but this is mostly dependent on the *wind*, as is noted in the table.

6. Though the weather, from a variety of irregular causes, is more uncertain in the latter part of autumn, the whole of winter, and the beginning of spring, yet, in the main, the above observations will apply to those periods also.

7. To prognosticate correctly, especially in those cases where the *wind* is concerned, the observer should be within sight of a good *vane*, where the four cardinal points of the heavens are correctly placed.

The above Table was originally formed by Dr. Herschel, and is now published with some alterations, founded on the experience of Dr. Adam Clarke.

WINDS.—The approach of high winds may be anticipated from these general prognostics: When cattle appear frisky, and toss their heads and jump; when geese attempt to fly, or distend and flap their wings; when sheep leap and play, boxing each other; when pigs squeal and carry straw in their mouths; when the cat scratches a tree or post; when pigeons clap their wings smartly behind their backs in flying; when crows mount in the air and perform somersets, making at the same time a garrulous noise; when swallows fly on one side of trees, because the flies take the leeward side for safety against the wind; when magpies collect in small companies, and set up a chattering noise.

VELOCITY AND FORCE OF THE WIND.

Ve'ty of the Wind			Ve'ty of the Wind.		
Miles in an hour.	Feet in a second.	Com. appellations of the force of the Winds.	Miles in an hour.	Feet in a second.	Com. appellations of the force of the Winds.
1	1.47	Hardly perceptible.	30	44.01	High winds.
2	2.93		35	51.34	
3	4.40		40	58.68	
4	5.87	Gentle, pleasant wind.	45	66.01	Very high.
5	7.33		50	73.35	A storm, or tempest.
10	14.67	Pleasant, brisk gale.	60	83.02	A great storm.
15	22		80	117.36	A hurricane.
20	29.34	Very brisk.	100	146.70	A hurricane that tears up trees, carries buildings before it, etc.
25	36.67				

WEATHER WISDOM.

A rainbow in the morning
Is the shepherd's warning ;
that is, if the wind be westerly, because it shows that the rain-cloud is approaching the observer.

A rainbow at night
Is the shepherd's delight :
this is also a good sign, if the wind be westerly, as it shows that the rain-clouds are passing away.

Evening red, and next morning gray.
Are certain signs of a beautiful day.

When the glow-worm lights her lamp,
The air is always damp.

If the cock goes crowing to bed,
He'll certainly rise with a watery head.

When you see gossamer flying,
Be sure the air is drying.

When black snails cross your path,
Black clouds much moisture hath.

When the peacock loudly bawls,
Soon we'll have both rain and squalls.

When ducks are driving through the burn,
That night the weather takes a turn.

If the moon shows like a silver shield,
Be not afraid to reap your field.

ELECTRICITY.

Butler, in his *Philosophy of the Weather*, says, that "the phenomena of electricity grouped and analyzed, disclose a potential, controlling, magneto-electric agency; and meteorology will advance rapidly to perfection, as a simple, intelligible, and practical science, *as soon as that agency is admitted.*" "Electricity," he also remarks, "is always perceptibly present in storms and showers within the tropics." He might have added, too, in our summer showers.

FINE WEATHER.

This may be expected if the thermometer rise less than usual in the morning, or fall more than usual in the afternoon, and the barometer rise. Expect fine weather, in summer, if there be no falling stars to be seen on bright evenings; and, also, if near the full moon there be a general mist before sunrise; or if there be white clouds drawing to the N. W.; or if the full moon rise clear. If it rain before sunrise there will generally be a fine afternoon; or, if in the morning a mist rises from the lowlands.

Dew.—If there be much dew in a summer evening after a dry day, or if a dew or white mist form in the evening near a river, and spread over the adjoining land, there will be fine weather.

Crows.—These utter a peculiar cry before rain, differing from their usual voice.

Fences.—Look well to the fences in early spring, especially around the pastures. Poor pastures and bad fences make breachy cattle.

Correct solutions of the Problems for 1858, have been received as indicated below.

Mr. A. Bronk, Mariaville, N. Y., all except No. 27.

NOTE.—Mr. A. L. Foot, Freeport, Long Island, N. Y., all except Nos. 15, 27; by some oversight, Mr. Foot did not receive credit for a large number of correct solutions last year.

Mr. Thomas P. Stowell, Hornelsville, N. Y., *all of the problems.*

Mr. Ogden A. Pratt, Green, N. Y., *all of the problems.*

Mr. Horace Otis, Adams Centre, all the problems, except No. 27.

Mr. S. B. Brand, Patterson, N. J., problems 2, 4, 7, 8, 9, 12, 16, 17, 18, 19, 20, 21, 24.

Mr. Ezra T. Clark, Bedford, N. Y., problems 2, 3, 4, 8, 9, 12, 16, 17, 18, 19, 20, 21, 24.

Mr. I. T. Landers, Oxford, N. Y., problems 2, 4, 8, 9, 12, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25.

Mr. Denis Keiley, New York, problems 1, 2, 3, 4, 7, 8, 9, 11, 12, 13, 16, 17, 18, 20, 21, 22, 23, 24, 26, and the *Algebraic* problem, which is not included in the above acknowledgments. The reason why no one else solved this, is probably because it was printed wrong.

We here give it again for a new trial, and call it problem 25th.

Given $x^5 + 15x^3 + 45x = 18$, to work by quadratic.

Notice.—The problems in this year's almanac (1859) have the answers omitted, and persons who send twelve or more correct *solutions* of these problems will have the same acknowledged in the next issue. Address Samuel H. Wright, Yates Co., N. Y., before May 5th. Letters to be answered must inclose a stamped envelope *fully directed*.

Errata.—Problem 7. Answer should have been 12.426, instead of 11.426. Problem 8, 1-6 n, etc., instead of 1-8 n, etc. Problem 10. The answer given is for a globe of one inch diameter instead of one foot, or one whose half angle is one; the right answer for it, as it reads is 206264.8 feet. Problem 6. Should have been *radius* 10 chains. The answer to the 15th problem is, Area; or surface generated equal to *infinity*, that is, the same surface is generated by *each* of an *infinite* number of *radii*. Problem 27. Answer.—5,550,996,791,340 times. Formula for this will be sent on application as above. For problem 16, there is another answer, viz.: 3 7-11 minutes past 4 o'clock.

S. H. WRIGHT.

A Mile Measure.—A standard English mile, which is the measure that we use, is five thousand two hundred and eighty feet in length, one thousand seven hundred and sixty yards, or three hundred and twenty rods. A strip one rod wide and one mile long, is two acres. By this it is easy to calculate the quantity of land taken up by roads, and also how much is wasted by fences.

"A Sabbath day's journey," one thousand one hundred and fifty-five yards; which is eighteen yards less than two-thirds of a mile. "A day's journey," thirty-three and one-third miles. "A reed," ten feet eleven and one-eighth inches. "A palm," three inches. "A fathom," six feet. "A cubit" is two feet. "A span" is ten thousand nine hundred and forty-four inches.

Board Measure.—Boards are sold by superficial measure, at so much per foot of one inch or less in thickness, adding one-fourth to the price for each quarter inch thickness over an inch.

20 RATES OF POSTAGE, AND POST OFFICE REGULATIONS.

LETTER POSTAGE.

For any distance not over 3,000 miles (half ounce).....	3 cts.
Each additional half ounce.....	3 "
To CALIFORNIA and OREGON (half ounce).....	10 "
Each additional half ounce.....	10 "
To or from CANADA, not over 3,000 miles (half ounce).....	10 "
Each additional half ounce.....	10 "

All letters sent in the United States must be prepaid, either by postage-stamps or stamped envelopes.

Weekly newspapers (one copy only), sent to actual subscribers within the county where printed and published, go free.

Quarterly Rates of Postage when paid in advance, on Newspapers and Periodicals sent from the office of publication to actual subscribers.

	Daily.	Six times a week.	Tri-Weekly.	Semi-Weekly.	Weekly.	Semi-Monthly.	Monthly.
Newspapers and Periodicals not exceeding 1½ oz. in weight, when circulated in the State where published.....	22½	19½	9½	6½	3½	1½	1
Newspapers and Periodicals of the weight of 3 oz. and under, sent to any part of the United States.....	45½	39	19½	13	6½	3	1½
Over 3 and not over 4 ounces.....	91	78	39	26	13	6	3
Over 4 and not over 5 ounces.....	1 36½	1 17	58½	39	19½	12	6
Over 5 and not over 6 ounces.....	1 82	1 56	78	52	26	12	6
Over 6 and not over 7 ounces.....	2 27½	1 95	97½	65	32½	15	7½
Over 7 and not over 8 ounces.....	2 73	2 34	1 17	78	39	18	9

POSTAGE ON TRANSIENT PRINTED MATTER.

Which must be prepaid by Postage-stamps before it can be transported in the mails of the United States.

Newspapers, periodicals, unsealed circulars or other article of printed matter (except books), when sent to any part of the United States—3 oz. or under, 1c.; 3 to 4, 2c.; 4 to 5, 3c.; 5 to 6, 4c.; 6 to 7, 5c.; 7 to 8, 6c.

Where more than one circular is printed on a sheet, or a circular and letter, each must be charged with a single rate. A business card on an unsealed envelope of a circular, subjects the entire packet to letter postage. Any transient matter, like a circular or handbill, inclosed in or with a periodical or newspaper sent to a subscriber, or to any other person, subjects the whole packet to letter postage.

Books, bound or unbound, not weighing over four pounds, may be sent in the mail prepaid by postage stamps, at one cent an ounce any distance in the United States under three thousand miles, and at two cents an ounce over three thousand miles, provided they are put up in a cover or wrapper open at the ends or sides, so that their character may be determined without removing the wrapper.

Bills and receipts for payments of moneys for newspapers may be inclosed in subscribers' papers.

Exchanges between newspaper-publishers, for one copy from each office, free.

Newspapers, etc., to be so inclosed that the characters can be determined without removing the wrapper; to have nothing written or printed on the paper or wrapper beyond the direction and to contain no inclosure other than the bills or receipts mentioned.

Be careful to direct all letters and papers, sent by mail, plainly, with place, County, and State.

AMERICAN PRESIDENTS.

	Where Born.	Date of Birth.	Term of Office.	Age when term expired.	Died.
Geo. Washington,	Va.,	Feb. 22, 1732,	1789 to 1797,	66,	Dec. 14, 1799
John Adams,	Mass.,	Oct. 19, 1735,	1797 to 1801,	do.,	July 4, 1826
Thomas Jefferson,	Va.,	April 2, 1743,	1801 to 1809,	do.,	July 4, 1826
James Madison,	"	March 5, 1751,	1809 to 1817,	do.,	June 28, 1836
James Monroe,	"	April 2, 1759,	1817 to 1825,	do.,	July 4, 1831
John Q. Adams,	Mass.,	July 11, 1767,	1825 to 1829,	62,	Feb. 23, 1848
Andrew Jackson,	S. C.,	Mar. 15, 1767,	1829 to 1837,	70,	June 8, 1845
Martin Van Buren,	N. Y.,	Dec. 5, 1782,	1837 to 1841,	59,	
Wm. H. Harrison,	Va.,	Feb. 9, 1772,	1841 —	69,	April 4, 1841
John Tyler,	"	Mar. 29, 1790,	1841 to 1845,	55,	
James K. Polk,	N. C.,	Nov. 2, 1795,	1845 to 1849,	54,	June 15, 1849
Zachary Taylor,	Va.,	Nov. 24, 1784,	1849 to 1850,	65,	July 9, 1850
Millard Fillmore,	N. Y.,	Jan. 7, 1800,	1850 to 1853,	53.	
Franklin Pierce,	N. H.,	Nov. 23, 1804,	1853 to 1857,	53.	
James Buchanan,	Penn.,	April 13, 1791,	1857 —		

Our country first, our glory and our pride,
Land of our hopes—land where our fathers
died ;

When in the right, we'll keep thy honor
bright ;
When in the wrong, we'll die to set it right.

The greatest cataract in the world is the Falls of Niagara, where the waters accumulated from the great upper lakes, are plunged over the rocks in two columns, to the depth of one hundred and sixty feet.

The greatest cave in the world is the Mammoth Cave in Kentucky, where one can make a voyage on the waters of a subterranean river, and catch fish without eyes.

The greatest river in the world is the Mississippi, four thousand one hundred miles in length. Its name is derived from an Indian word, meaning "the father of waters."

The largest valley in the world is the valley of the Mississippi. It contains five hundred thousand square miles, and is one of the most prolific regions on the globe.

The largest lake in the world is Lake Superior, four hundred and thirty miles long.

The longest railroad in the world is the Central Railroad of Illinois, which is seven hundred and thirty-one miles long—cost fifteen millions of dollars.

The largest number of whale-ships in the world are sent out by Nantucket and New Bedford.

The greatest grain port in the world is Chicago.

The largest aqueduct in the world is the Croton Aqueduct in New York. It is forty miles and a half long, and cost twelve millions and a half of dollars.

The United States are composed of thirty-one states and nine territories.

They contain a population of twenty-seven millions, of whom twenty-three millions, are white.

The extent of sea coast is twelve thousand five hundred and fifty miles.

The length of the ten principal rivers is twenty thousand miles.

The surface of the five great lakes is ninety thousand square miles.

The number of miles of railroad in operation is thirty thousand, which cost seven hundred and eighty million dollars.

The length of canal is five thousand miles.

The annual value of its agricultural productions is four hundred thousand dollars.

Its most valuable production is Indian corn, which yields four hundred millions eight hundred bushels.

The amount of capital invested in manufactures is six hundred millions.

The annual amount of its internal trade is six hundred million dollars.

The annual value of its products of labor, other than agricultural, is fifteen million dollars.

The annual value of the income of the inhabitants is fifteen million dollars.

The value of farms and live stock is five hundred million dollars.

Its mines of gold, copper, lead, and iron are among the richest in the world. The value of gold produced is one hundred million dollars.

The surface of its coal fields is one hundred and thirty-eight thousand one hundred and thirty-one square acres.

Within her borders are eighty thousand schools, five thousand nine hundred academies, two hundred and thirty-four colleges, and twenty-three thousand eight hundred churches.

Whatever difficulty there may be in obtaining a good wife, it is a very easy matter, when once such a treasure is obtained, to recognize those virtues and qualities which she possesses. A good temper, a love of home, cheerfulness, neatness, and industry, is evinced in her own appearance and in that of her household; and these attractions can not fail of asserting their influence over the husband, and will, indeed, seldom fall short of full appreciation by him.

There are many causes of matrimonial disagreement—many in which the faults are pretty equally balanced—many in which the wife is to blame, and *vice versa*; but there are cases in which the good wife is rendered careless and indifferent, not so much from any positive bad qualities on the part of the husband, as by his neglect and want of reciprocal kindness. This is creative of discomfort and unhappiness where none need to exist, and should be especially guarded against.

A good wife is a valuable possession, and should be esteemed as such. It has been eloquently said, that "A good wife is to a man wisdom, and courage, and strength, and hope, and endurance; a bad one is confusion, weakness, discomfiture, despair. No condition is hopeless when the wife possesses firmness, decision, energy, economy. There is no outward prosperity which can counteract indolence, folly, and extravagance at home. No spirit can long resist bad domestic influences. Man is strong, but his heart is not adamant. He delights in enterprise and action, but to sustain him he needs a tranquil mind and a whole heart. He expends his whole moral force in the conflicts of the world. His feelings are easily lacerated to the utmost point of endurance by perpetual collision, irritation, and disappointment. To recover his equanimity and composure, home must be to him a place of repose, of peace, of cheerfulness, of comfort; and his soul renews its strength, and again goes forth with fresh vigor to encounter the labors and troubles of the world. But if at home he finds no rest, and is there met by a bad temper, sullenness, or gloom; or is assailed by discontent, complaint, and reproaches, the heart breaks, the spirits are crushed, hope vanishes, and the man sinks into total despair. Let woman know, then, that she ministers at the very fountain of life and happiness. It is her hand that deals out, with overflowing cup, its soul-refreshing waters; or casts in the branch of bitterness, which makes them poison and death. Her ardent spirit breathes the breath of life into all enterprise. Her patience and constancy are mainly instrumental in carrying forward to completion the best human designs. Her more delicate moral sensibility is the unseen power which is ever at work to purify and refine society. And the nearest glimpse of heaven that mortals ever get on earth is that domestic circle which her hands have trained to intelligence, virtue, and love, which her gentle influence pervades, and of which her radiant presence is the centre and the sun."

Such is the language in which the power and influence of a good wife has been pictured; and experience serves to confirm its truthfulness. Perhaps she is even more potent for evil than for good; and when we remember how the bad preponderates in every thing, truly those who have good wives have ample reason to congratulate themselves, and should show by their own conduct that her virtues are recognized and appreciated. A truthful writer, treating of a good wife and a happy home, has well said—

Happy is the man who has a little home and a kind little wife in it of a Sunday night. A house, no matter how little, provided it will hold two or so—no matter how humbly furnished, provided there is hope in it; let the wind blow—close the curtains. What if they are calico, or plain white border, tassel or any such thing. Let the rain come down,—make a cheerful fire. No matter if you hav'nt a candle to bless yourself with, for what a beautiful light glowing coal makes, shedding a sunset through the room; just enough to talk by, not loud as in the highway, nor rapid as the hurrying world, but softly, slowly, whisperingly, with pauses between, for the storm without and the thoughts within, to fill up.

Then wheel the sofa round before the fire—no matter if the sofa be a settee, plain and uncushioned, so that mutual cheerfulness and good will sit there together. How sweetly the music of silver bells, telling of joy in the time to come, falls on the listening heart then.

"Oh, the atmosphere of home! how bright
It floats around us when we sit together,
Under a bower of vine in summer weather,
Or round the hearth-stone on a winter's night."

It is in the power of husband and wife—if they will only mutually so determine—to make home a scene of comfort, and a harbor of happiness.

"A man who gives his children habits of industry, provides for them better than by giving them a stock of money."

The Past! what is it but a gleam, which Memory faintly throws?
The Future! 'tis a fairy dream, that Hope and Fear compose.
The Present! 'tis the lightning glance, that comes and disappears,
Thus Life is but a moment's trance of Memories, Hopes, and Fears.—ANON.

Self-reliance is the main spring of thrift and enterprise. Instead of waiting, as Micawber did, for "something to turn up," exert your own energies, and turn up something yourself. If our self-denial cost us nothing, it would teach us little. A caustic writer says, "The power of self-delusion is Heaven's blessing to fools." It needs a long head to control a long tongue. If you pride yourself on saying what you like, you will often be mortified by hearing what you don't like. How many thoughts we waste, how much care and anxiety we expend, in forming plans to meet emergencies that never occur! Never be "behind time." "I have noticed," said Napoleon, "that it is the quarters of hours that decide the fate of battles." It is better to buy good counsel cheap than repentance dear. People may tell you of your being unfit for some peculiar occupation in life, but heed them not; whatever honest employment you follow with perseverance and assiduity will be found fit for you, and will be your support in your youth, and comfort in age. "A good word is an easy obligation; but not to speak ill requires only our silence, which costs us nothing." In the worldly struggles, passive endurance is no less useful than active energy. No bad quality or vice carries its appropriate punishment along with it more surely than heartlessness.

A GOOD RULE.

A man who is very rich now, was very poor when he was a boy. When asked how he got his riches, he replied, "My father taught me never to play until my work was finished, and never to spend my money until I had earned it. If I had but one hour's work in a day, I must do that the first thing, and in an hour—and after this I was allowed to play; and then could play with much more pleasure than if I had the thought of an unfinished task before my mind. I early formed the habit of doing every thing in time, and it soon became perfectly easy to do so. It is to this I owe my prosperity.

FAMILY HINTS.

1. You may be quite sure that your will is likely to be crossed in the day; so prepare for it.
2. Every body in the house has an evil nature as well as yourself, therefore do not expect too much.
3. Learn the different temper of each individual.
4. When any good happens to any one, rejoice at it.
5. When inclined to give an angry answer, check yourself, and count thirty.
6. If, from sickness, pain, or infirmity, you feel irritable, keep a very strict watch over yourself, and by constraint command your temper.
7. Observe when others are so suffering, and drop a word of kindness and sympathy suited to their state.
8. Watch for little opportunities of pleasing, and put little annoyances out of the way.
9. Take a cheerful view of every thing, of the weather, etc., and encourage hope.
10. Speak kindly to the servants, and praise them for little things when you can.
11. In all little pleasures that may occur, put self last.
12. Try for "the soft answer that turneth away wrath."
13. When you have been pained by an unkind word or deed, ask yourself, "Have I not often, done the same, and been forgiven?"

Hon. George Bancroft delivered a lecture before the New York Historical Society, in which the following eloquent tribute is paid to the philosopher Franklin :

"Not the half of Franklin's merits have been told. He was the true father of the American Union. It was he who went forth to lay the foundation of that great design at Albany ; and in New York he lifted up his voice. Here, among us, he appeared as the apostle of the Union. It was Franklin who suggested the Congress of 1774 ; and but for his wisdom, and the confidence that wisdom inspired, it is a matter of doubt whether that Congress would have taken effect. It was Franklin who suggested the bond of union which binds these states from Florida to Maine. Franklin was the greatest diplomatist of the eighteenth century. He never spoke a word too soon ; he never spoke a word too late ; he never spoke a word too much ; he never failed to speak the right word at the right season."

NEWSPAPERS IN THE WORLD.

The following is supposed to be the number of newspapers in the world : ten in Austria, fourteen in Africa, twenty-four in Spain, twenty in Portugal, thirty in Asia, sixty-five in Belgium, eighty-five in Denmark, ninety in Russia and Poland, three hundred in Prussia, three hundred and twenty in other Germanic States, five hundred in Great Britain and Ireland, about two hundred and fifty in France, and eighteen hundred in the United States."

VALUABLE RECEIPTS.

For preserving the complexion, temperance ; for whitening the hands, honesty ; to remove stains, repentance ; for improving the sight, observation ; for improving the voice, civility ; to keep away moths, good society ; the best companion to the toilet, a wife.

HERE GIRLS, IS SOMETHING FOR YOU.

The words of a German author to his daughter are so full of wisdom, that the young lady who should make them her rule would avoid half the scrapes of her companions : "Converse always with your female friends as if a gentleman were of the party, and with young men as if your female companions were present."

THE TOOTHACHE.

"My dear friend," said H——, "I can cure your toothache in ten minutes." "How ? how ?" I inquired. "Do it in pity." "Instantly," said he. "Have you any alum ?"

"Yes."

"Bring it with some common salt."

They were produced. My friend pulverized them, mixed them in equal quantities, then wet a small piece of cotton, causing the mixed powder to adhere, and placed it in my hollow-tooth.

"There," said he, "If that does not cure you I will forfeit my head. You may tell this to every one and publish it everywhere. The remedy is infallible."

It was as he predicted. On the introduction of the alum and salt, I experienced a sensation of coldness which gradually subsided, and with it—the alum and salt—it cured the torments of the toothache.

A happy home must have integrity for its architect, and neatness for its upholsterer. It must be warmed by affection, lighted up with cheerfulness, and industry must be the ventilator, bringing in fresh salubrity day by day.

The window-sill decorated with flowers, wherever it is seen, may be accepted as a proof that in that home some degree of happiness is known—however lowly may be the position of the inmates. There are few surer tests of a happy home within than the flower-decorated window and a neatly-kept garden; and there is no occupation for the leisure hours more calculated to keep it so, or to soothe the mind. To those blessed with children, how delightful it is to bend their young minds to a pursuit so full of instruction, combined with the advantages of industry! and in children carefulness about their plants will lead to the same feelings respecting other matters.

AN ARGUMENT FOR MARRIAGE.

Powers, the sculptor, writing to a friend on what people call the folly of marrying without the means to support a family, expresses frankly his own fears when he found himself in this very position; but he adds, with characteristic candor: "to tell the truth, however, family and poverty have done more to support me than I have to support them. They have compelled me to make exertions that I hardly thought myself capable of; and often, when on the eve of despairing, they have forced me, like a coward in a corner, to fight like a hero, not for myself, but for my wife and little ones." The truth here expressed by the gifted sculptor, is like a similar remark we heard not long since, by a gentleman from Boston, who tried matrimony in the same way, and found afterward that the loose change in his pocket, which he had squandered in "foolish notions," was enough to support a prudent wife, who, by well-regulated economy, has proved a fortune in herself, and had saved a snug sum of money for her once careless husband. "A wife, to direct a man toward a proper ambition and to a general economy," he said, "was like timely succor at sea, to save him from destruction on a perilous voyage."

An Irish tailor, making a gentleman's coat and vesting too small, was ordered to take them home and let them out. Some days after, the gentleman was told that his garments happening to fit a countryman of his, he had let them out at a shilling a week.

"READIN', SPELLIN' AND SPANKINS."

A bevy of little children were telling their father what they got at school. The eldest got grammar, geography, arithmetic, etc. The next got reading, spelling, and definitions. "And what do you get, my little soldier?" said the father to a rosy-cheeked little fellow, who was at that moment slyly driving a tenpenny nail into a door-panel. "Me? Oh, I gets readin', spellin', and spankins."

A SLEIGH-RIDE.

SAFE AND COMFORTABLE.

There is a bright man who makes jokes for the people. Here is one of his manufacture:

"B**** hates cold weather much more than he loves sleigh-riding. Yet he promised to take his wife out whenever he found 'everything just right.' 'When will that be?' asked his spouse, weary of perpetual teasing to no purpose. 'Why, when there is first-rate sleighing in June,' replied the inexorable husband."

Dandelions.—When these blow out full, early in the morning, expect fair weather that day.

IGNORAMUS.

Whether first the egg or the hen?
Tell me, I pray you, ye learned men.

FIRST SCRIBE.

The hen was first, or whence the egg?
Give us no more your doubts, I beg.

SECOND SCRIBE.

The egg was first, or whence the hen?
Tell me how it could come, and when.

NEVER GIVE UP.

Never give up! though the grape-shot may
rattle,
Or the full thunder-cloud over you burst;
Stand like a rock, and the storm and the
battle
Little shall harm you, though doing their
worst.

Never give up! if adversity presses,
Providence wisely has mingled the cup;
And the best counsel in all our distresses
Is the stout watchword of — "Never give
up!"

FRIENDLY ADVICE.

SOOTHING AND STRENGTHENING.

Has Fortune frowned, my honest friend!
Don't hang your head so low;
This is no time to falter now—
Up! strike another blow!
Don't sit, and groan, and grunt, and tell
What you have *tried* to do;
But place your shoulder to the wheel;
Strain nerve! you'll carry it through.

Fortune sometimes wears caps and bells
And plays some funny tricks;
She's made you throw a double ace—
Now throw a double six!
All that you want is nerve, my friend;
Misfortune is no sin;
And if she knocks you on your back,
Hop up, and try again!

There's truth in this old saying, man—
Plain truth, I pledge my word;
As true as any sermons I
From pulpit ever heard,—
When all looks dark keep up your heart;
In sunshine make your hay;
In either case you'll find that *all things*
Can't always run one way."

IMPROMPTU.

"Come, kiss me," said Robin, I gently said
"No."
For my mother forbid me to play with
men so."
Ashamed by my answer he glided away,
Though my looks pretty plainly advised
him to stay.
Silly swain, not at all recollecting—not he,
That *his* mother ne'er said that "he
must not kiss me."

CONUNDRUMS.

1. What wig can not a barber make?
2. Why is a farmer surprised at the letter G?
3. Why is coffee like an axe with a dull edge?
4. Why is a spectator like a bee-hive?
5. What is every one doing at the same time?
6. Why is the letter G like the sun?
7. Why is a school-mistress like the letter C?
8. When is a clock guilty of a misdemeanor?
9. What bush is superior to all others in age?
10. What tree decorates dresses and cushions?

ANSWERS.

1. An Earwig.
2. It will change oats into goats.
3. It must be ground before being used.
4. He is a be(e)holder.
5. Growing older.
6. It is the centre of light.
7. She forms lasses into classes.
8. When it strikes one.
9. The Elder Bush.
10. The Fringe Tree.

RIDDLE.—By Mrs. Barbauld.

From rosy bowers we issue forth,
From east to west, from south to north;
Unseen, unfelt, by night, by day,
Abroad we take our airy way;
We foster love and kindle strife,
The bitter and the sweet of life;
Piercing and sharp, we wound like steel—
Now, smooth as oil, those wounds we heal;
Not strings of pearl are valued more,
Or gems encased in golden ore;
Yet thousands of us, every day,
Worthless and vile, are thrown away.
Ye wise, secure with bars of brass
The double doors through which we pass;
For, once escaped, back to our cell
No human art can us compel.

L. G.

ANSWER TO THE RIDDLE.

Words foster love and kindle strife,
The bitter and the sweets of life,
Piercing and sharp, they wound like steel—
Yet soft and smooth those wounds they heal.

ANSWER TO THE RIDDLE ACROSTICALLY.

Wonderful things *words* will produce,
Oft rising high in foul abuse;
Rude words are sure to bring on more,
Dealt out wholesale from tattler's store,
So if they wound, those wounds they cure

BY G. W. EVERETT.

How blest the Farmer's simple life !
How pure the joy it yields !
Far from the world's tempestuous strife,
Free 'mid the scented fields !

When morning woos, with roseate hue,
O'er the far hills away,
His footsteps brush the silvery dew,
To greet the welcome day.

When Sol's first beam in glory glows,
And blythe the sky-lark's song,
Pleased to his toil the farmer goes,
With cheerful steps along.

While Noon broods o'er the sultry sky,
And sunbeams fierce are cast,
Where the cool streamlet wanders by,
He shares his sweet repast.

When Twilight's gentle shadows fall
Along the darkening plain,
He lists his faithful watch dog's call,
To warn the listening train.

Down the green lane young hurrying feet
Their eager pathway press ;
His loved one's come in joy to greet,
And claim their sire's caress.

Then, when the evening prayer is said,
And heaven with praise is blest,
How sweet reclines his weary head
On Slumber's couch of rest !

Nor deem that fears his dreams alarm,
Nor cares with barking din,
Without, his dog will guard from harm,
And all his peace within.

Oh, ye who run to Folly's race,
To win a worthless prize ;
Learn, from the simple tale we trace,
Where true contentment lies !

O, monarch ! flushed with glory's pride !
Thou painted, gilded thing !
Hie to the free born farmer's side,
And learn to be a king.

FARMER'S COMFORT.

Now, my good friends, as you no doubt like to see pictures, let me show you a Family Picture. It is a cold evening ; the wind blows the snow about merrily, the sleigh-bells are jingling, and the creaking sound of the snow under the cutters shows, as we say, snapping cold weather "about this time." Presto ! just look in this glass, and see Farmer Aimwell's family ! There are the father, the mother, the three sons and two daughters, either sitting at the table, or drawing up cosily around the good oak fire. The farmer has just put down his paper, and has taken up his book. Everything betokens comfort, quiet, prosperity, and enjoyment. The storm may rage outside the house, but all is happiness here. And why should it not be so ? Through the Spring, the Summer, and the Autumn, each one puts hands to the work with a will ; everything necessary to be done about the farm was done well, and in its right time ; and now, with full barns and full cellars, all are enjoying the fruits—the reward of patiently bestowed labor and skill.

I wish I could tell you more of these happy people ; but—in one word—May their lot be yours !

APPLES.

I had occasion to overhaul some apples the other day. They were picked in the same orchard and on the same day, and were put away the same day ; some in flour barrels and some in lime barrels. Those in the flour barrels were much decayed, while those in the lime barrels were sound, and but very few showing any signs of decay. The apples were of the same variety. This observation may prove of service.—*New Jersey Farmer.*

Ornamental Trees.—One of the modes by which a farm, a neighborhood, a town, or a country, can be improved, is by planting these. He who plants and tends a tree raises a monument that may survive him a hundred years, improving the land, and adding greatly to the wealth and prosperity of the state.

There is no doubt but that the free use of good fruit is highly conducive to health, and, indeed, almost indispensable to it. It is the great scarcity of good fruit that creates such a demand for physic in our Western country. The various fevers and bilious disorders prevalent in the summer season are more owing to the want of it than to any other cause. And not until fruit is generally cultivated, and used as an article of diet, shall we be rid of those disorders which are sapping the life-fountains of thousands of our farmers annually. And if fruit were administered, in many cases, as an article of medicine, instead of the physician's prescription, we have no doubt it would be far better for the patient.

Nature, in this, as in all other respects, has bountifully supplied us with varieties, which, if properly cared for, will enable us to enjoy a succession throughout the year. But fruit is not only a necessary of life, it is one of its greatest luxuries. What is more enticing to the palate than luscious fruit? And as an article of diet nothing equals it. It is easily raised, costs but little, promotes health, and is liked by everybody. Most people content themselves by cultivating but two or three varieties. This should not be so. Fruit is more needed throughout the summer season than almost any other part of the year. And the varieties which ripen at this time are least cultivated. The farmer can not take a step which will add more to his own joys, and to those of his own family, than by having such a succession as will furnish him with fruit the entire year.

First on the list in spring-time comes the delicious strawberry. But a little spot of ground is required for its cultivation for the use of the family. Its healthful qualities are well known. Cities well supplied with it are remarkably exempt from disease while the strawberry season lasts. We have accounts of wonderful cures effected in ancient times by its use. There are many varieties, but it is not our purpose to note the best of these at this time.

Next in order, comes the raspberry, a most excellent fruit, and indispensable to every family. Then follows the blackberry, the cherry, currants, and gooseberries. Then comes the apricot, the peach, the nectarine, and the plum. Apples and pears, also, commence ripening early in summer, and the winter varieties, if properly stored, may be kept till the appearance of fruit next season. Who will not have this succession? How much it would add to home happiness!—*Valley Farmer, St. Louis.*

A DOUBLE CROP.

Plant and cultivate early potatoes upon deep-plowed, well-manured land, upon the level system, and whenever you are ready to set out cabbage-plants, place them in rows between the rows of potatoes, and although somewhat shaded, they will get a good start and will make fine heads after the potatoes are ripe or dug for early use. In this way a person with only a limited quantity of ground may raise a double crop.

AGRICULTURAL PAPERS AND BOOKS.

Mr. Flint, in the "Returns of the Agriculture," says: "We are gratified to notice the increasing patronage of agricultural papers, and the multiplication of books treating of farming, gardening, etc. The time has gone by when men laugh at book-farming."

Who leaves certainty and trusts to chance,
When fools pipe, then he may dance.

BY CHARLES L. FLINT.

The following appropriate and judicious hints were kindly furnished, at our request, by Mr. Flint, and are well worthy of careful perusal, and prompt practical application, by our farming friends. May these hints be as "seed sown in good ground." We wish that others, familiar with these topics, and as well qualified, practically and theoretically, would commit their thoughts to paper, and, by publishing them, circulate information valuable to all interested in agriculture.

FARM IMPLEMENTS.—Pay a little more to get good and durable implements, and do not compel the maker to slight his work to meet the demand for a *cheap* article. "Cheap" things are often dearest in the long run.

WINTER WORK.—Success in farming depends much on the quantity and quality of the manure you can make *on the farm*. Fresh barn-yard manure is greatly injured by exposure to heavy rains, which dissolve the most valuable parts, and cause a waste far greater than is generally supposed. A good barn-cellar will save it, and a good supply of stiff loam or subsoil will afford a profitable winter's work in composting.

MANURES.—If you can not make manure enough on the farm, and are compelled to buy concentrated manures, the best Peruvian guano is the cheapest, as its results are well known, and more reliable than the manufactured or commercial manures.

STIR THE SOIL.—Nothing is so important, in dry weather, as a frequent and thorough stirring of the surface soil, in cultivated grounds. Do not fear increasing the effect of drought by it. The air, however dry it may seem, is teeming with moisture, and its free admission to the roots is essential to the healthy growth of the plant. Therefore, stir the soil with the cultivator or the hoe.

INNOVATIONS AND IMPROVEMENTS.—Do not laugh at innovations. The greatest improvements of modern times were at first ridiculed by those who had gradually to adopt them.

GOOD SEED.—Be careful in the selection of seed. Raise it yourself, or get that raised in the neighborhood, if possible. The smaller the seed, the less it should be covered with earth, in sowing.

YOU CAN NOT AFFORD TO KEEP POOR STOCK.—No farmer can afford to keep poor stock. The cost of keeping the poorest is nearly as great as that of the best, while the income is far less, to say nothing of the satisfaction of owning stock that you can justly be proud of. Select none but the best to breed from, and do not sell the best calf because the butcher will pay the highest price for it.

IMPROVED IMPLEMENTS, BOOKS, ETC.—The introduction of improved farm implements into general use has given a most efficient aid to the progress of practical agriculture. Books disseminate ideas. Implements, successfully operated, prove these ideas to be of practical value.

IMPROVE YOUR FARMS—BEGIN NOW!—Do something every year to improve your pasture lands. Grub up some of the bushes, or plough up a piece, even if it be small, and seed down in September with grass-seed and rye. If you can not afford to put it into good tilth, turn over the sod to a good depth, harrow in what manure you can spare, and sow in the seed. You will find the cattle seek this new feed greedily next year. Do not hesitate to begin, even if your means are limited, to do something by way of improvement. "Well begun is half well done;" and many a farmer, by beginning right, has awakened in his own mind an interest in his calling which he never felt before, and so his first effort has ended in the renovation of the man, as well as the land.

Many a useful life may be spared to be increasingly useful by cutting a cold short off in the following safe and simple manner :—On the first day of taking a cold there is a very unpleasant sensation of chilliness. The moment you observe this, go to your room and stay there ; keep it at such a temperature as will entirely prevent the chilly feeling. In addition, put your feet in water, as hot as you can bear, adding hot water from time to time for a quarter of an hour, so that the water shall be hotter when you take your feet out than when you put them in ; then dry them thoroughly, and put on warm, thick woolen stockings ; and for twenty-four hours eat not an atom of food, but drink as largely as you desire of any kind of warm teas, and at the end of that time, if not sooner, the cold will be effectually broken, without any medicine whatever.

Those who are liable to cold should bear in mind, that the system is rendered more susceptible after the taking of liquid refreshments. When there is much liquid in the system, the perspiration is increased, and there is greater risk if the body has to be exposed. Half a dozen cups of warm tea may be very beneficial *after* a cold has been taken, but there is no reason why you should take them before setting out in damp wind ; nor, indeed, should any one depend on spirits as a preventive. Proper clothing and brisk exercise will enable any one to withstand the attacks of wind and rain, provided the body be temperately nourished and the mind kept buoyant.—*Medical Journal*.

PAINTING AND COLOR OF COUNTRY HOUSES.

Genuine white lead is one of the dearest of paints. It is not economy which leads us to adopt it. We scarcely know any thing more uncomfortable or injurious to the eye, than to approach the sunny-side of a house in one of our brilliant mid-summer (and we may say mid-winter) days. It is absolutely painful. We think the color of all buildings in the country should be of those soft and quiet shades called neutral tints, such as fawn, drab, gray, brown, stone-color, etc. ; and that all positive colors, as white, yellow, red, etc., should be avoided. A very slight admixture of a darker color, is sufficient to remove the objections to white paint by destroying the glare of white, the only color that reflects the sun's rays. Caution is necessary not to have the buildings too dark and sombre.—*Abridged from Downing's Horticulturist*.

HOW TO MAKE GOOD TEA.

Boil rain water and pour upon your tea, letting it steep from one to two minutes if you wish to realize the true taste of the "plant divine." Well, river, or spring water, in many parts of the country is strongly impregnated with lime, which acts chemically upon the tea-leaf, and greatly deteriorates, or destroys its fine aromatic flavor. In fact, water, containing lime, or much vegetable matter in solution, has more or less effect upon all kinds of cookery. Besides, it is highly injurious to the health of most persons.

To Cleanse the Teeth and Improve the Breath.—To four ounces of fresh prepared water, add one drachm of Peruvian bark, and wash the teeth with this water in the morning and evening, before breakfast and after supper. It effectually destroys the tartar on the teeth, and removes the offensive smell arising from those that are decayed.

Feeding Stock.—Never feed stock so well in the early part of winter that it can not be fed better toward spring. Never feed young stock so well that it can not be fed better as it advances in years.

THE MUTUAL LIFE INSURANCE COMPANY

OF NEW YORK.

This Company held its third Quinquennial meeting on the 10th of February, 1858.

A Dividend of 40 PER CENT. was declared on all participating premiums received during the last five years; the reversionary value of which is added to the face of the policy, and varies, according to the age of the assured, from 47 to 119 per cent. on the amount of participating premiums paid.

The Receipts of the Company for the five years ending 31st of January, 1858, were \$4,751,169 10.

The claims paid on account of death, during the same period, amounted to \$1,445,786 17.

The net increase of accumulations for the same time amounted to \$2,627,468 22.

The total net Assets of the Company, and which are the property of the Assured, amount to nearly \$4,750,000.

The business of this Company is conducted upon the mutual principle, in the strictest sense of the term; the entire surplus, deducting necessary expenses alone, being divided *pro rata* among the Assured.

SECURITY FOR THE ASSURED.

Security is, in Life Assurance, the paramount consideration. If a man insure a house or a ship with a company or an individual of whose credit he gets doubtful, he will forthwith insure somewhere else. But Life Assurance is quite a different affair. The bargain is one that may not, perhaps, be finally concluded for fifty years; and any inability on the part of an establishment in extensive business to make good its engagements, would be productive of a degree of misery not easily imagined.

Parties, therefore, about to assure, should look well to the circumstances best calculated to guarantee to them the security of their investments.

INVESTMENTS.

The Assets of this Company are entirely made up of receipts of premiums and interest on its loans, and are *exclusively* cash.

As the premiums and interest accumulate, no unnecessary time is lost investing them, on Bond and Mortgage, on first-class unencumbered real estate in the city and State of New York.

The outstanding loans of the Company are all at 7 per cent. interest, and amount in the aggregate to nearly $4\frac{1}{2}$ millions of dollars. The real estate mortgaged to the Company is situated mostly in the city of New York and vicinity, and is, in all cases, worth double the amount loaned. There are also Fire Insurance Policies assigned to, and deposited with, the Company, as collateral security, amounting to $2\frac{1}{4}$ millions of dollars, beside personal guarantees to a considerable amount.

Each Bond and Mortgage is examined by the Finance Committee, and also by a Special Committee of the Board of Trustees. Thus it will be seen that *the securities are sound, reliable, safely kept, and properly managed.*

BOARD OF TRUSTEES.

FREDERICK S. WINSTON,
MILLARD FILLMORE,
DAVID HOADLEY,
WILLIAM V. BRADY,
HENRY A. SMYTHE,
ROBERT H. MCURDY,
JOHN V. L. PRUYN,
WILLIAM BETTS,
ISAAC GREEN PEARSON,
WILLIAM MOORE,
JOHN H. SWIFT,
W. E. DODGE,

RICHARD PATRICK,
JOSEPH BLUNT,
NATHANIEL HAYDEN,
JONATHAN MILLER,
ALEX. W. BRADFORD,
JOHN P. YELVERTON,
JOHN WADSWORTH,
WILLIAM J. BUNKER,
SAMUEL M. CORNELL,
SAMUEL E. SPROULLS,
JOHN M. STUART,
HAMLIN BLAKE,

ALFRED EDWARDS,
LUCIUS ROBINSON,
SAMUEL D. BABCOCK,
GEORGE S. COE.
CHARLES J. STEDMAN,
CEPHAS H. NORTON,
WILLIAM K. STRONG,
EZRA WHEELER,
WILLIAM H. POPHAM,
LYCURGUS EDGERTON,
W. SMITH BROWN,
GEORGE R. CLARK.

FREDERICK S. WINSTON, *President.*

Secretary, ISAAC ABBATT.

Actuary, SHEPPARD HOMANS.

Medical Examiner, MINTURN POST, M. D.

Office, No. 94 Broadway.

DR. T. FELIX GOURAUD'S ITALIAN MEDICATED SOAP.

THIS admirable emollient is now, by common consent, rated A No. 1 as a remedy for blotches, chaps, chafes, cracks, pimples, pustules, scurf, tan, freckles, sunburn, and all kinds of eruptions, and every species of discoloration and disease of the skin. All competition has been completely distanced by this invaluable preparation, the demand for which, within the last six months, has increased more than five hundred per cent. and is still increasing. The clearness and freshness which its use imparts to the complexion have rendered it proverbial as a beautifier of the skin; and no dressing-room can be considered furnished with a proper toilet that lacks

GOURAUD'S ITALIAN MEDICATED SOAP.

It is also a delicious compound for shaving, and can be used in hard or soft water, and is a sovereign and instantaneous remedy for the bites of mosquitoes and other insects. If beauty be, as it is asserted, only skin deep, it is the more important that the thin covering in which loveliness resides should be kept in its present and most attractive state. Dr. G. might go on amplifying the merits of his Italian Medicated Soap, but he thinks that the number of certificates which have been published throughout the Union, at a cost of several thousand dollars to the Doctor, from eminent Physicians, Clergymen, Members of Congress, Captains of Ships, Officers of the Army and Navy, and a host of distinguished Ladies, the original of which testimonials can always be seen, if required, are, the Doctor thinks, sufficient to convince any one not willfully blind. If there be any such, the Doctor might apply to them the language of Scripture, and say, "If ye believe not Moses and the Prophets, neither would ye believe though one rose from the dead."

GOURAUD'S POUDRE SUBTILE

Uproots hair from low foreheads, upper lips, or any part of the body. Warranted.

GOURAUD'S HAIR RESTORATIVE

Is warranted to prevent hair from falling off, and render harsh, wiry hair soft, silky and glossy.

GOURAUD'S LIQUID ROUGE

Will impart to the pale cheek and lip a crimson flush as magnificent as that of the rose.

GOURAUD'S LIQUID HAIR DYE

Will change red or gray hair to a beautiful black or brown, the instant it is applied, without staining the skin.

GOURAUD'S LILY WHITE

Instantly dispels redness, flushes, and roughness.

Beware of deception, and remember that it is impossible to procure the genuine preparations of Dr. Gouraud except at his dépôt, 67 Walker-street, first store from Broadway; Bates, 129 Washington-street, Boston; Callender, 88 South Third-street, Philadelphia; Peter Smith, Fifth-street, Cincinnati; Carleton, Lowell; Green, Worcester; Bliss, Springfield; McNarry & Buck, Hartford; Sheppen, New-Haven; Cameron, Bridgeport; and generally throughout the Union.

SANDS' SARSAPARILLA

For Purifying the Blood, and for the Cure of

Scrofula, Rheumatism, Stubborn Ulcers, Dyspepsia, Salt-Rheum, Fever Sores, Erysipelas, Pimples, Biles, Mercurial Diseases, Cutaneous Eruptions, Liver Complaint, Bronchitis, Consumption, Female Complaints, Loss of Appetite, General Debility, etc., etc., etc.

It has long been a most important desideratum in the practice of medicine, to obtain a remedy similar to this, and accordingly we find it resorted to almost universally in all those tormenting diseases of the skin so trying to the patience, and injurious to the health. It is a tonic, aperient, and disinfectant. It acts simultaneously upon the *stomach*, the *circulation*, and the *bowels*, and thus three processes, which are ordinarily the result of *three* different kinds of medicine, are carried on at the same time through the instrumentality of *this one* remedial agent. Thousands have been cured by it, and Tens of Thousands may be restored to health by its use. Ask for Sands' Sarsaparilla, and take no other; it will not fail you.

ROMAN EYE BALSAM.

This Balsam was used for many years in the private practice of a celebrated Oculist with the greatest success. In cases where the

EYELIDS ARE INFLAMED,

or the ball of the Eye thickly covered with blood, it acts almost like magic, and removes all appearances of inflammation after two or three applications. There is a numerous class of persons that are peculiarly exposed to accidents or diseases that weaken and inflame the Eyes, and perhaps destroy the sight, such as miners, operatives in metals, and other mechanics, who, from the nature of their employments, are compelled to work in a cloud of dust and grit. Such should never be without this Balsam.

CLOVE ANODYNE TOOTHACHE DROPS.

COMPLAIN NO MORE OF ACHING TEETH.

These Drops have been extensively used by thousands, whose experience has proved that the Anodyne will give immediate and permanent relief, after the failure of every other remedy.

It will not unpleasantly affect the breath like Kreosote, injure the gums, or destroy the enamel of the teeth. The numerous cures it has accomplished are well attested, and it has only to become generally known to be as highly appreciated by the public as it has long been by Dentists.

PERUVIAN FEBRIFUGE,

FOR THE PREVENTION AND CURE OF

FEVER AND AGUE,

Intermittent and Remittent Fevers, Liver Complaints, Jaundice, Dumb Ague, Dyspepsia, Nervous Headache, and all the different forms of Bilious Diseases.

AGUE and FEVER is the most common form of bilious disease, and its prevalence in almost every section of our country, together with its debilitating and disheartening character, is sufficient to insure to a *certain* remedy, a ready welcome. Such a welcome has greeted this medicine from thousands who have had the happy experience of shaking, freezing, and burning, by turns, until hope of relief had almost gone. It is the result of practical experience and observation, for a number of years, in the treatment and cure of this disease; and such has been the uniform success in its use, that no case is known where it has failed to cure when regularly administered.

For further confirmation, and certificates of cure, see our "*Family Medical Almanac*," which can be had of all our Agents gratis.

The above medicines are prepared and sold, wholesale and retail, by A. B. & D. SANDS, Druggists and Chemists, 100 Fulton Street, corner of William, New York. Sold also by Druggists generally throughout the United States and Canadas.

ARE YOU INSURED?

THE RUTGERS FIRE INSURANCE COMPANY.

CASH CAPITAL, \$200,000.

Surplus, August 1, 1858, \$70,000, securely invested in Bonds and Mortgages.

Office, 176 CHATHAM SQUARE, cor. Mott St., N.Y.

BRANCH, 11 MERCHANTS' EXCHANGE, WALL ST., N. Y.

This Company insures against Loss or Damage by FIRE, on the most favorable terms.

ALL LOSSES WILL BE IMMEDIATELY ADJUSTED, AND PROMPTLY PAID.

DIRECTORS.

ISAAC O. BARKER, *President.*

JOHN W. KETCHAM, *Vice-President.*

OLIVER W. WOODFORD,

SAMUEL RAYNOR,

JOHN B. SIMPSON,

CHAS. D. BAILEY,

ELIJAH F. PURDY,

JOHN ROBINSON,

M. STENHUNSON,

A. S. SCRIBNER,

JOHN H. BOWIE,

THOMAS WALLACE,

JACOB MILLER,

W. H. ADAMS,

GEORGE J. HAMILTON,

WILLIAM PEET,

JOSEPH WHITFIELD,

EDWIN A. HOPKINS,

JAMES Y. WATKINS,

JAMES DAVIS,

HARRISON HALL,

JOSEPH ROSE,

DAVID H. M'ALPIN,

MERRIT H. SMITH, JR.,

WILLIAM SIMPSON,

EDGAR M. CRAWFORD,

GEORGE H. PURSER,

JOHN ASH,

JAMES L. STEWART,

ELIAS S. HIGGINS.

JONATHAN PURDY,

JOHN PETTIGREW,

DARIUS FERRY, *Surveyor.*

EDWARD B. FELLOWS, *Secretary.*

CAPILLINE,

OR

HAIR EXTRACT.

This Extract is to supply nutriment to the Hair, thereby increasing its Growth and Beauty. It will on the first or second application stop the shedding of the Hair, arising from any cause whatever—by the proper use, according to the Directions, it will in a short time produce a new and beautiful growth of Hair.

The above is a plain Statement of Facts, and no Puff, as will be shown by trial.

Prepared by the Proprietor,

F. PUNDERSON,

HUDSON, N. Y.

A NATIONAL STANDARD.

—•••—
WEBSTER'S

QUARTO DICTIONARY,

THE ENTIRE WORK UNABRIDGED.

From Professor HAVEN, of the University of Michigan.

"If called upon to sacrifice my library, volume by volume, the book which I should preserve longest, except the Bible, is the AMERICAN DICTIONARY OF THE ENGLISH LANGUAGE, by Dr. Webster."—E. O. HAVEN.

"All young persons should have a standard DICTIONARY at their elbows. And while you are about it, GET THE BEST; that Dictionary is NOAH WEBSTER'S—the great work, *Unabridged*. If you are too poor, save the amount from off your back, to put it into your head."—*Phrenological Journal*.

"Every farmer should give his sons two or three square rods of ground, well prepared, with the avails of which they may buy it. Every mechanic should put a receiving box in some conspicuous place in the house, to catch the stray pennies for the like purpose. Lay it upon your table, by the side of the Bible; it is a better expounder than many which claim to be expounders. It is a great labor saver;—it has saved us time enough in one year's use to pay for itself; and that must be deemed good property which will clear itself once a year. If you have any doubt about the precise meaning of the word *clear* in the last sentence, look at Webster's thirteen definitions of the *v. t.*"—*Massachusetts Life Boat*.

OFFICIAL STATE RECOGNITION.

Nearly every State Superintendent of Public Instruction in the Union, or corresponding officer, where such a one exists, has recommended WEBSTER'S DICTIONARY in the strongest terms. Among them are those of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Kentucky, Indiana, Illinois, Missouri, Michigan, Iowa, Wisconsin, Louisiana, California, North Carolina, Alabama, Minnesota, and also Canada,—TWENTY-THREE in all.

STATE PURCHASES.

THE STATE OF NEW YORK has placed 10,000 copies of Webster's Unabridged in as many of her public schools.

" " " WISCONSIN, 3,300—nearly every school.

" " " NEW JERSEY, 1,500—nearly every school.

" " " MICHIGAN, 2,000, and made provision for all her schools.

" " " MASSACHUSETTS, has supplied her schools—nearly all.

More than *ten* times as many are sold of Webster's Dictionaries, as of any other series in this country.

At least *four-fifths* of all the School-Books published in this country own Webster as their standard, and of the remainder, few acknowledge any standard.

Published by G. & C. MERRIAM, Springfield, Massachusetts.

ODELL S. HATHAWAY,

No. 64 Water-st., Newburgh,

Hardware and Leather Store,

WHOLESALE AND RETAIL,

WHERE CAN BE FOUND


A GENERAL ASSORTMENT OF HARDWARE,

Consisting of sets of ivory-handled knives and forks, latest patterns; table knives and forks; dessert do.; carvers; forks and steels; pen, pocket, butcher, bread and mincing knives; razors, scissors and shears; files and rasps; hand, panel, iron back, compass and wood saws; bench and moulding planes; braces and bitts; cast steel chisels and gouges; plated and iron squares; augers and patent auger bitts; compasses; saw-sets; ivory, box and common rules; broad and narrow cast steel axes and hatchets; carpenters' adzes and drawing knives; masons' stone and lath hammers; brick and plastering trowels; steelyards, patent balances, scale beams, weights, shovels, spades, hoes, forks, hay and straw knives; tailors' irons, brass kettles, churn castings; trace and halter chains; locks, screws, bolts, latches, hinges; brass, iron and japanned candlesticks; snuffers and trays; coffee mills; Britannia tea and coffee pots; cloth, hair, horse, flesh and floor brushes; curry combs; brass and block tin liquor cocks, etc., etc.; hollow and wooden ware; smiths' bellows; willow wagons, cradles, chairs and baskets; patent pails, tubs, churns, bowls, trays, ladles, rollers, pounders and washing machines; corn shellers and straw cutters; wagon boxes. Carriage trimmings, consisting of laces, fringe, tufton, stump joints, finishers, plated mouldings, plated coach door handles and hinges, top bows; the most celebrated elliptic wagon springs; curled hair; bark mills; corn and plaster crackers. Also, for sale, nails at manufacturers' prices. Also, a large and well selected assortment of the best and most approved Agricultural Implements.

A General Assortment of Leather.

The subscriber hereby informs the public that he is now manufacturing harness, bridle, upper, welt and belt leather; calf, kip and sheep skins. Also, on hand, superior oak-tanned stretched leather beltings, patent leather, morocco, lining and binding skins, with a general assortment of curriers' and tanners' tools, and a superior assortment of lamp black. Also a handsome assortment of findings and shoe trimmings, viz.: awls and hafts of superior quality, shoe knives, pincers, nippers, sand stones and paper, bristles, kit irons neatly cut. Nicoll's patent punches, common do.; boot web and cord, sewing, stitching, and fitting thread, ferreting, ribbon, galloon, Denmark satin, prunella, lastings, Russia sheeting, boot and shoe trees, boot crimps, lasts, etc., etc., etc.

All of which will be sold on as good terms as they can be purchased in the village.

 Cash paid for hides, calf, sheep and lamb skins.